Selma, March 26/59.

My dear Sir:

I have just received your kind letter, and will with pleasure comply with your request, and prep all the good specimens of Cronnia I can get; I have now some, prepared last summer, but they are not perfect; I fear I shall not be able to send you as many as I would wish, as my boys, made wild work in my bed of Cronnia roots, not knowing them to be of any value. I send you a little present, although it is not a botanical specimen; but I know you cannot love flowers, and be indifferent to the beautiful creations of Providence. When I first came South I kept with little humble moral of them reptiles in a box about a foot square, with a glass sliding door. They only

require a few living flies occasionally; and some leaves wet with dew for drink. Their mode of catching flies is curious; and I have never yet seen them spring at their prey, and fail. It belongs to Anolius of Cuv. but I do not know the species. When I get enough plants, to make it worth while I will send them to you. There are many Orchids here, but it is very difficult to procure them in flower, and they grow scattered about generally in the woods; but I will do the best I can, with the greatest pleasure,

Yours most truly

P. H. Cable

To Prof. Asa Gray.

P.S.

I forgot to mention, that this is the Chamelion of the south; and changes (under excitement) from one color to another with rapidity. There is also a dewlap under the throat; which it can spread out like a fan, which is of the most beautiful cherry color.

P. H. C.

S. A. BACON. W. W. CALKINS.

BACON & CALKINS,

ATTORNEYS AT LAW,

Real Estate and Loans,

RENTING.——PENSIONS.

Room 32, Inter Ocean Building.
(N. W. Cor. Dearborn and Madison Sts.) TELEPHONE

Branch Office: 1162 JACKSON ST. TEL. 7206.

Chicago, 189 0

Prof. Sereno Watson,
Dear Sir

A friend of mine sends me the enclosed leaves of a medical plant from Cal. which he is anxious to know the name of. It is said to be a sure cure for bad forms of dysentery when all else fails — He has no flowers or fruit or I would send them. You may know the plant perhaps.

Very truly &c
W. W. Calkins

Palo Alto, Cal.
Oct. 26.

Dr. Sereno Watson.

Dear Sir:

You may remember I spoke to you about ordering a copy of the Botany of California when I saw you in Cambridge last summer. I have already had one bought for the library, but wish to get one myself. I find that it is not to be had in San Francisco, and should be much obliged to you if you will have a copy sent me. Unless there is some special arrangement for sending by express I think it had better be sent by mail. If you will let me know what the cost is I will send you the amount at once.

Very truly yrs.
Douglas H. Campbell.

Leland Stanford Jr. Univ.
Palo Alto.

Palo Alto
Nov. 13. '91.

My dear Dr. Watson,

The copy of the California Botany reached me today, and I enclose a postal order for the amount £10.80. I have no doubt that you will receive in due time the money for the other copy. All of the bills, the miscellaneous things are in my hands, and the number at present must be very large, as everything has had to be ordered this year. Thanking you for sending the books so promptly,

I am
Very sincerely yours.
Douglas H. Campbell

To Dr. Asaph Watson
Cambridge.

Genève - 25 août 1837

Monsieur

Si j'ai tardé jusqu'ici à répondre à la lettre que vous m'avez adressée le 15 mars dernier c'est que j'ai voulu attendre l'arrivée de la caisse que vous m'annonciez, j'avions de la recevoir en bon état et je vous remercie sincèrement et du choix des échantillons et du prix modéré auquel vous voulez bien les passer. Mais j'ai sur son contenu quelques explications à vous demander. Vous m'annonciez l'envoi de 1900 espèces et vous ne mentionnez nullement que la caisse contienne rien destiné à d'autres. Cependant j'y ai trouvé des paquets sans désignation contenant environ 1100 espèces, puis un certain nombre de paquets portant çà et là les noms du Musée ou du Bon de Cussert. Je n'ai pas osé les déballer avant d'avoir des explications de vous ou de M. Castaigne. La caisse entière m'est-elle destinée ou bien dois-je en expédier une partie à d'autres? mais dans ce dernier cas je serois loin d'avoir les 1900 espèces que vous m'annonciez. En tout cas je suis prêt à payer à M. Castaigne les fr. 58 que je vous dois ou après explication ou même de suite avec la caisse que s'il n'y a pour moi que 1100 espèces le surplus sera imputé sur le premier envoi.

Je suis en effet, Monsieur, très disposé à continuer d'acquérir la suite de vos recettes, mais comme je suis obligé de mettre quelque réserve dans mes achats et que je ne fais pas d'échanges de plantes, je préfère recevoir de simples collections, aimant mieux avoir plutôt des espèces en grand nombre

que des echantillons multiples; mais je vous demanderai d'avoir bonté de m'envoyer quand vous le pourrez des echantillons en fleur et en fruit et ma confiance intéressée à votre équité pour en fixer les prix.

Je viens de passer un mois à Paris et j'ai cherché l'occasion de vous être utile. j'ai vu M. Delessert qui prend vous beaucoup d'intérêt et qui m'a dit vous avoir expédié vers la fin de son ministère une petite somme que vous aviez du recevoir. j'ai vu aussi son successeur M. Salvandy; le connaissant peu je n'avais pas grande espérance de réussir auprès de lui. j'ai engagé M. l'amiral Roussin à appuyer ma demande en votre faveur; il l'a fait d'une manière fort aimable et dont si vous le voyez vous feriez bien de lui adresser des remerciemens; mais malgré cet appui la demande est restée infructueuse. le Ministère de l'Inst. publ. a dit que son budget étoit épuisé. Quoique je croie bien que ce n'est qu'un prétexte cette réponse vous permettrait peut-être de renouveller votre demande pour 1838. M. l'amiral Roussin pourrait vous donner d'abord ce conseil à cet égard. J'ai eu beaucoup de regrets de ces mauvais succès mais j'ai bien senti que n'ayant en réalité aucun titre pour me mêler de cette affaire j'avais peu de chance de succès; j'espère au moins que la manière dont j'ai exposé ma demande au nom des intérêts de la Botanique aura plutôt préparé favorablement le Ministre que le contraire.

J'ai trouvé dans la caisse que je viens de recevoir un certain nombre de Compteurs. malheureusement le premier volume relatif à cette famille a déjà paru et le second est sur le point d'être entièrement imprimé. je vais tâcher d'étudier immédiatement les Compteurs de votre envoi afin d'avoir occasion de les citer en votre nom, ou dans les quelques pages qui me restent à imprimer ou dans les addenda que j'ai l'habitude de mettre à la fin des familles. il me serait agréable d'attirer ainsi l'attention sur vos découvertes. j'aurai soin de me conformer à votre instruction sur les numéros et à mesure que j'avancerai je vous conserverai mes notes sur la nomenclature de vos numéros.

Le voyage que vous m'annoncez et dans lequel vous êtes probablement engagé à l'heure qu'il est aura je n'en doute pas d'heureux résultats pour la Botanique: il serait intéressant de fixer si c'est possible les limites de la végétation orientale et de la végétation indienne. les collections du col. Chesney faites sur les bords de l'Euphrate ~~et celles d'Olivier~~ recueillies en Perse, le prouvent indiquer que là encore on ne trouve que des plantes orientales. où commence donc la flore indienne? Si vous vous vouiez à votre projet de visiter la partie centrale de l'Asie, je vous recommande cette question qui se présente tout autant sur les limites de l'Inde avec l'Asie centrale qu'avec l'Asie occidentale; mais elle y est moins curieuse parce qu'elle se complique avec la différence des latitudes. Si on allait directement de la Perse méridionale à la partie occidentale de l'Inde en suivant la même latitude, ou comme faisait on de trouver la végét. de l'Orient pour entrer dans celle de l'Inde. j'avais pensé à une route que c'est la chaîne qui de Caboul va directement du N. au S. au golphe d'Oman. la chaîne qui de Caboul va à Teheran établit elle une limite botanique entre la Perse ou la vég. d'Orient et le Turkestan qui jouerait à la vég. de la Sibérie? la chaîne qui de Caboul se rend au Nord de la Chine en enseignant l'Asie centrale au Nord comme l'Himalayas au Sud, détermine elle la limite naturelle de la région botanique de la Sibérie? il y a de belles choses à faire dans un pareil voyage et je vous souhaite vie et santé: c'est tout ce qu'il faut pour que vous ayez des succès.

Agréez je vous prie tous mes souhaits et l'assurance de ma parfaite considération

A. D. Candolle.

Lettre de A. P. de Candolle
à Auchar-Eloy, qui paraît n'avoir
pas été expédiée

a Monsieur, Auchar-Eloy
chez m.r André Crespin negoc.nt
a Galata
Constantinopla

PS. un ami m'a dit, hier, qu'il pourra un bel Arabe m. Philippe Dumont, d'Alexandrie, et vous recommandera, quant aux parties qui y sont, de l'envoyer à Constantinople et quant aux parties qui n'y sont pas encore, il vous nous les enverra. a Montpellier et pour remettre au prix courant et nous pourra ainsi indemniser. Il faudra nécessairement le faire, mais, si vous collectez, [illegible]. Si nous pouvons avoir la commande vous [illegible] de plus en plus et nous aurons une [illegible] pour la porte. Je vous recommande, m.r Auchar, [illegible] mon nom. Si vous avez occasion de traiter [illegible] quant, comme cela, on me fait de votre longueur, pour [illegible] que m'en [illegible].

Londres n. 4. Storastreet

Vous avez bien voulu, mon cher Monsieur, me faire espérer que je pourrois par votre crédit auprès des courtiers obtenir quelques échantillons nommés avec certitude quant au nom commercial et au pays d'où on les tire; je prends en conséquence la liberté de vous adresser la notte des objets dont je désirerois des échantillons quelques petits qu'ils fussent mais authentiques; je vous prie de ne pas vous effrayer de leur nombre et de croire que je serois très reconnoissant lors même que vous pourriez n'en procurer que quelques uns. je tire les noms de votre dictionaire de Kaufman. Encore je vous prie mes excuses pour la peine que je vous prepare et l'expression de ma parfaite considération.

A. D. de Candolle.

Desiderata.

1. aloe-wood. les diverses especes, savoir calambac, calambour, common &c
2. Balsam of Gilead et Balsam of Mecca si on les distingue dans le commerce.
3. Brasil wood et Brasillatto wood les diverses especes confondues sous ces deux noms
4. Camphire du Japon, de China, de Bornéo, de Sumatra.
5. Dragon's-blood. en distinguant les diverses especes ne sut ce que d'après le pays et pourrai je en avoir des échantillons?
6. Frankincense de Turquie et de l'Inde orientale.
7. Gum anime d'orient et d'occident.
8. Indian rubber diverses especes de China, de l'Inde orientale et de la Guiane.

9. Indigo les diverses especes du commerce avec leurs noms vulgaires et leur patrie.

10. Ipecacuanha gris, brun et blanc de l'Inde et de l'Amerique.

11. Lignum vitae seu guajacum. d'Amerique et du Cap de Bonne Esperance.

12. Log-wood les diverses especes.

13. Mahogany. les diverses especes.

14. Nicaragua wood.

15. Quercitron bark.

16 Rhubarb les diverses especes.

17. Tea - les especes du commerce

N.B. il est inutile d'ajouter que je ferai volontiers les petites depenses que pourroient exiger ces echantillons.

Ans. Aug 30 — Sent via Smithsonian Inst

Campfield

Fl. W. Anner
Mass. Bot. Soc. U.S.
Bot. Wheeler —
Dr. Bartlett

Monterey, Oct. 6th, 1859.

Dear Sir;

This first moment of leisure I improve in answering your favor of July 9th, for which accept my thanks. I have now ready quite a quantity of botanical specimens to send you; but am quite ignorant as to the mode of ~~sending~~ packing them for a sea-voyage; but suppose that they do not need to be hermetically sealed, — only well packed in wooden boxes.

You did not inform me how you would receive them if by Express ~~by express~~, or otherwise, and the Express Cos. are getting tired of carrying packages free. I suppose you will expect me to direct to you at Cambridge, and if nothing happens you may look for a box within a month or two.

If you can send me your Flora of N. Am. as far as it is published, and the Bot. of Whipple's Exp.; and of the Sec. Bound. Com.; and also your Flora of the N. U. States, I will feel much obliged to you. Please send them by Wells, Fargo & Co's Express, or by Freeman & Co; — at my expense; — directed to Dr. C. A. Canfield, Monterey, Cal.

I expect to live in the interior (at least, some 80 miles in the interior) before long; & then I can do better for you than I am now doing. I hope to be able to collect the plants of the Salinas R. & of the Coast Mts. on both sides of the Salinas, within a year or

two, as I told you before. - What a pity that all that has been published on the Botany of California & this Coast, has not by some one been collected & published in one Volume! Even the Coniferae alone are worthy of a Volume of their own. —

Since writing the above, I have been informed by the Agent here of Wells, Fargo & Co's Express that they will send packages free, for scientific purposes, that I may have to send you or others. —

At any rate, I will pay charges on anything you send me by Express, as before directed. —

Yours respectfully,
C. A. Canfield.

Prof. Asa Gray,
Cambridge.

New York 17th July 1846

My dear friend

We are at length favored with a Visit from our Youngest Brother Charles, who has been a resident at Laguayra & Caracas in Venezuela for many Years. He is now (with his wife) en Route for England, & has brought us a Box of Epiphytes which were collected for him a Week or two pre-vious to his Departure by a soi disant Savant who happened to be there, & who assured him there were some very curious forms among them that he believed new to Europe.

John & I thought they might prove acceptable Hot house Guests to you, & in that Hope I send on the Box; & shall be pleased to hear that the Contents prove of Interest.

John continues low & poorly & I feel much Anxiety about him. My own sick Flock (thank God) are well. — Do not forget me if any good Californian or Rocky Mountain Collectors are in market.

I am my Mr Farrer
With Sincere Regard
Yrs truly
Jas T. Harry

P.S. Your two Reviews of the "Vestiges" are capital.

Recd

25

Profess: Asa Gray
Cambridge
near Boston
Mass.t

JUL 17 N.Y.

New York 16 June 1847

My dear friend

A gentle Breath of Rumor has wafted this Way the News that the hitherto untameable Fisher Proof, often a severe Wound from a Pair of bright Eyes, has been caught, caged, & tamed; & is in a fair Way to become as valuable a Member of Society as the Rest of us Family Men. — In sober Earnest, my dear Gray, I rejoice sincerely that it is so: this was the one thing needful to put the top-stone of Comfort to your present eligible Position in Society; & I fervently hope that your & your Hearts' chosen one may have many Years of mutual Happiness & Usefulness before you. May you be striking Illustrations of what the Class Moodscia should be: One House, one Heart, one Hope. —— Dear John's Letter 11th inst. did not reach me in due Course, as I went up the North River on Saturday to fetch home my eldest Boy, who had been on a fortnight's Visit to an Aunt of his. I take the earliest Opportunity to attend to your Wish about Onosmodium, hoping

that the Lapse of one day may not cause Incon-
-venience. I have only 4 Specs. of the Lemnia
in my Herbm., & send herewith a leaf & flower of
each. My Florida Specn. is but a poor one; it
looks different from the rest. The Lebanon Specn.
differs a good deal in pubescence from yours; the
other I presume to be the same as yours.
If any "Quiddities" are found such concerning
them, I should like to have an Inkling
thereof. Once more, best Wishes & felicitations
to you Dear Gray, & believe me
truly & friend
S. F. Cony

N Y 20 Jul 1848

My dear friend, I regretted much that I missed the opportunity of seeing you & your "Sarah far better part" when you were on here. Unfortunately I was sick at home, when at the same time I found poor John was still more so at his Lodgings, otherwise I must have seen you at Trinity, which I understand you visited. — However accept my tardy felicitations, & present the same with my Respects to Mrs G. May God bless & prosper you both. — I am delighted with the first part of your Genera, which I got from Sibley on its Advent: me judice, it goes ahead of any thing yet published in this Country as a classic botanical Work, & I shall be much disappointed if you do not find it warmly welcomed in Europe. — I safely received some time since the Pack. of Fendler's Plants. Thank you for your Agency in the matter. I enclose you the amt. say $40 — in Dft. of City Bk N.Y. on City Bk, Bos. in your favor for 39 37. The 63 cents I have paid to John which he desires me to tell you is the amt. of shipping Expenses on a Box rec.d from Engelmann for D. Wislizenus & shipped to Bremen. Engelmann has been advised by him of same,

John is still very weakly, having had one or two Returns of Bowel Complaint, but is I think getting better. — His low Spirits prey on his Health. He told me how kindly you & Mrs. G. had pressed on him a Visit to Boston, connected with some botanical Occupation. — I think it would be very desirable for him to do so, as a Change of Bread & Cheese connected with his beloved Study, would give him more Happiness than a better Emolument drawn from the Pursuit of Business.

In the meantime I want you to do me a Favor. — You & Mr. Olney long since proposed to him to join in the Purchase of a lot of White Paper, for your Herbaria: John's intended Size & mine were to be the same as yours, & I know he has as yet delayed getting any not liking to disburse the Cash. I want to give it him, & sho.d like to get it at once, as it wo.d furnish him Occupation just now. I should to have 7 or 8 Reams of it: perhaps you have some on hand of which you could spare me a part, & order for me from the Making enough to replace yours & complete what I want. I offer no Excuse for troubling you in the Matter, as I know you take Pleasure in serving him. — If you can send it me, please do so by Express to Pine St. & let me know the Cost — Do not say anything to John about it as I wish to serve him up a Surprize — We go out of town next Week for about a Month: I shall try to get him to go with us.

Believe me
Sincerely Your's
Alex.d Wm. Gray

P.S. Findlay's Specimens are (considering all Circumstances) excellent. We were both surprised to see so few Southern forms & Genera. The little Rocky Mountain fellows were very acceptable, but quite unlooked for. I am curious to know the limits of his Hunting Ground. S. F. C.

Prof^r Asa Gray
Harvard College
Cambridge
Mass^ts

New York 25 Aug 1848

My dear friend

You left me starting for a Journey, which I achieved with difficulty, but was taken down the same afternoon with intermittent fever. However good nursing, fresh Hill Air, & large doses of Quinine & Ammonia that almost made me light headed, set me up again in a few days, & I recruited very much before my Return to town. City Life has rather pulled me back again, but still "I smell the Rose above the Mould" once more, as poor Tom Hood sings, & a sober second thought makes me wish for the Set of California Plants, you were good enough to order for me. So please send them along on Arrival. — John got quite strong & cheerful in the Country, & has been very comfortable since his Return to town, keeping me company in my Bachelor Estate. I hope you have not forgot my Wish about Herbm Paper for him, which I know would be acceptable to him in his present Leisure. — He showed me your last kind Letter: my own Inclinations point to his Stay here, but my Judgment tells me he would be happily employed, if occupied in his darling Study, & I counsel him

by all means to pay you a Visit, tho' if the Worth of Botany on this side the Atlantic is not big enough for both. I think you will see him before long. You know from himself that he has given up his wild notions of running away from us, no more to be entertained I trust. God bless & prosper you my dear friend, & believe me truly Yours

S. F. Cary

Prof^r A. Gray
Harvard College
Cambridge
Mass^ts

AUG 5

good little wife have quite revived the golden Age in the devotedness of their mutual Love. She unhappily had a fausse Couche with a six months Child but is about again well. He has just got his Herbarium over & I hope will again get among the Linnaeans, where he would be a useful Authority for the U.S. Flora. I have never yet thanked you for your kind & acceptable Present of the Pl. Wrightianae Pars 1. I have been waiting an Opportunity to do so in propriâ Personâ, but have now to add my thanks for the Jussieu Correspondence, which Dr. T. forwarded to me. The Copy for John shall go to him by first Opport.y — Have you ever continued the Fendler Plants beyond Campos.a or have Lindheimer or you finished the Texan Collections? I have in my Herbarium sundry Plants from both fels still unchris-

My dear friend,

I send you by Adams' Express a Box which Mr. Fendler before his Departure to Valparaiso requested me to forward to you on its Arrival here. — He sent off his Boxes by a freight Train from Cincin.i & owing to the Trouble at Erie, they were detained somewhere en Route, & he had to leave the Country without them. In his Distress I offered to look out for them & send them on to him. The World seems to have shown the poor fellow a cold Shoulder; he seemed quite "out of suits with fortune". He is going to form Collections of Plants & Seeds ~~at~~ in Venezuela, & should you or any of your botanical friends incline to patronise him, he would doubtless be glad of it. He is to send me his particular Address as soon as he has one. — Among his Traps are some Plants gathered at Camden, Ark.s & Memphis Tenn.s which

he wo^d dispose of abolitives they were thought worth. – They are not generally very good Specimens, & some are not particularly western Plants. I name them to you thinking it possible some botanical Elève of your's might like to have them.

It is indeed a long, long time since I had the Pleasure of taking you by the hand; the two last times I heard of your being in the City, I was sick at home; & am now a poor hobbling Invalid. A Year ago I fell down an empty Ship's Hold, broke four Ribs, shattered the bone of one knee & badly tore the flesh of the other, besides greatly injuring the Nerves of my head, & destroying the senses of Taste & Smell. To prove the fallibility of human Judgment; contrary to the Expectations of friends & Physicians, I by God's Mercy got about again, & still pretend to be a Man of Business, tho' not strong enough to devote much time & attention to it, & I shall probably very soon retreat entirely to my pretty farm at East Chester, where I have laid out a Garden of 3/4 of an Acre & hope soon to have something pretty & interesting to look at in it. I sho^d like particularly to get some seeds of Plants varieties & pulchriores from the West & S^o West of No. Amer.^a & if your Gardener could spare me a few such they would be doubly welcome as coming from an old & esteemed friend. Jeanie Torrey kindly gave me a few seeds last Spring gathered by a lover in the West who visited the dear D^r; some turned out showy, but some quite interesting e.g. Nicollet's Edwardsia, Baileya multiradiata, Coreopsis Drummondii, & a few others, that probably blossomed for the first time in West Chester Co. You will be glad to hear that brother John continues as happy as any of his friends could desire: he & his

-tered, tho' some may be described in books to which I have not access.

With sincere Regards & best wishes for you & yours

I am very truly
Yours
S. F. Carey

New York 15 Feb.

Prof. A. Gray.

Florence 22 may 1868

My dear Sir

I have received at last the parcel of books you sent me. They have reached me through the agency of Mr. Luciano Dall'acqua of Milan, agent to the Smithsonian Inst. in Italy. I need scarcely say, how very much I feel obliged towards you for yr gift, as I am thus enabled to consult for the first time several of yr works which hitherto I knew only by name. I only wish I could in return be of some use to you at some future time. For the present I continue in Florence,

ner at all events a letter would reach me with certainty if addressed here, even if I had left, which I purpose doing as soon as I succeed in getting somewhere — situation, better than the precarious and miserable one in which it has pleased the government of this country to retain me.

Believe me always dear Sir

Yours sincerely

T. Carmel

Florence 2 October 1869

My dear Professor Gray

I am commissioned by our friend Mr. Caruel to remind you of his desire to exchange his "Giornale botanico" with all scientific periodicals, acts of academies &c. that are published in the States — he means all those that may contain articles of botanical interest. You were so kind as to make him hope you would be the means of putting him in correspondence with the editors of such periodicals, and he wishes to know whether the thing can be done. Three numbers of the Giornale have already appeared, and the fourth is to come out shortly.

I seize this opportunity to enquire after yr doings. I suppose this letter will find you returned to

America, so I send it there. Mrs. Gray I hope is in a satisfactory state of health. I beg you to present her my best respects.

Since I had the pleasure of your visit in Florence we have ~~experienced~~ much affliction at home. Two of my boys — those you saw — have been ill, one of them dangerously so; and a third, a darling child, our last-born, has been taken away from us. Its mother fell ill from grief of its loss, and is only now recovering. ~~[illegible]~~ My usual labours have been of course much disturbed, but now I have returned to them, with increased intensity of will to find in them the means of diverting my thoughts from sad recollections.

I had great hopes of getting the professorship at Turin, since I had learned that De Notaris had refused it, and I had no other competitor but the assistant to the late professor Moris, a certain Mr. Delponte, in fact I had been led to consider my nomination as certain. But my competitor was strongly supported by the University at Turin; and so the Ministry, not daring to name me in opposition to the vote of the University, has decided on having us tried by competitive examination — a thing so utterly abhorrent to my feelings, that I feel very much inclined to refuse the trial, though it seems my last chance of getting a situation in this country.

You will be sorry to hear that the establishment at San Donato (Demidoff's villa) is being broken up. I have been told that the plants are on sale, and the gardeners to be dismissed. My own botanical garden has been made over to the Municipality here, and I have left the direction of it.

Believe me always with the respect regard

Yours sincerely

T. Caruel

DIREZIONE
DELL' ORTO BOTANICO
DELLA R. UNIVERSITÀ DI PISA

9 January 1872

My dear Professor

You may well be surprised at receiving no letter from me, and no acknowledgement of the parcel you have sent me. The fact is that in August last I had a note from the Secretary of the Smithsonian, apprizing me of the package as having been sent to me at the Museum in Florence; receiving nothing, after some time I enquired at the Museum, and then at all the public offices that could possibly know something of the business, and at last wrote to Mr. Dall' Aqua, the agent of the Smithsonian in Milan, from whom I had no answer — and now poor fellow there is no more applying to him, as I have just seen in the papers that he has been found dead in one of the canals in

Milan, and to all appearances murdered. I regret the more this deficiency in the communications with America by means of the Smithsonian, as I too have a book which I very much wish to send you (a work on the geographical botany of Tuscany) and don't know how to do it, I dare not trust it to the posts, as once it happened to me that a parcel of books sent to Dr. Engelmann, tho' prepaid here by me, was charged to him at a preposterous rate, several dollars I believe.

My waiting month after month for the parcel has also been the reason for which I have not written to you as yet, to inform you of the sudden and most welcome change in my position which took place in the spring of last year, by my being appointed to the professorship of botany in the University here and the directorship of the botanic gardens, since october I am established here with my family. Tho' Pisa is a dull town, not to be compared to Florence for its resources, yet we are very well off under other respects, myself especially, as I have plenty of work to my liking, sufficient materials for study, and a position amongst the best to be had in Italy in our branch.

M. Beccari, whom you no doubt recollect, has again left Italy for the Indian Archipelago, with the intention of visiting New Guinea. He has left me the management of the italian journal of botany.

I hope my dear Professor to hear from you ere long, and to have satisfactory news of the health of Mrs. Gray, to whom I beg to be respectfully remembered. With my best regards I remain

Yours sincerely
T. Caruel

P. S. If in my present abode I may be of any use to you in a botanical or any other way, pray reckon on my best endeavours.

DIREZIONE
DELL' ORTO BOTANICO
DELLA R. UNIVERSITÀ DI PISA

20th July 1892

My dear Professor

I am doubly in debt towards you, having to answer yr two last very kind letters, and at the same time to thank you for the botanical papers you have sent me, all of which (i.e. those you mentioned) I have safely received. There is a new agent of the Smithsonian in Milan, and by his means I shall regularly forward to you anything I may happen to publish; but I am afraid that will not be much, as my time is so taken up with lecturing and the small work of the garden, that very little leisure is left me for scientifick research. That is unfortunately the case with the occupants of all the University chairs in Italy, who dispose of a very limited staff for the management of their collections, and must either neglect them and their professional duties, or

be content to do very little original work. However I have managed to get an assistant, and am training him to take off my hands much of the routine business. Your friend M. Emerson, to whom as an intelligent and practised observer I was much gratified to show the garden here, will be able to give you an account of it. I found it in rather an antiquated state, with much bush and hedge but not many plants, and am trying to get it by degrees into good order. The library and herbarium &c. are sufficient for ordinary purposes.

Pisa is not only quiet, but a very dull place indeed; the inhabitants have scarcely any intercourse with each other, and even amongst the professors there is no intellectual tie. There is also a great deficiency of schools for children. In all other respects, climate, living, &c., Pisa is a very eligible abode indeed, and a good central station for the study of the natural products of central Italy.

I am at present at the sea-side near Leghorn with my family, who are all doing well. Next month I intend making a tour thro' Germany, Holland, England and France, to visit my friends and relations there, and examine some of the botanical establishments. I trust I shall find Dr. Hooker in the possession of Kew, it would be an arrant shame for England and a very great injury to science were that Mr. Ayrton to get the better of him in their contest, as H. seems determined to resign were such the case. I earnestly hope it will not be so, and that the memorial presented to Mr. Gladstone by the most eminent naturalists of England will avert what would be a real calamity to botany.

Mr. Caruel here is very busy trying to get up a horticultural show and botanical congress for the spring of 1874, an interesting one. I wonder whether it will succeed.

Mr. Emerson gave me satisfactory news

of yourself and yr family. I hope I shall continue to receive such news from you when you write again. With my best respects to Mrs. Gray I beg you to believe me always yours very sincerely

T. Carlyle

hunt up what has been written on a subject, than to rediscover all about it; I shouldn't be surprised at a revival of a class of bookworms whose only business would be to give information about what others had written, a class arising from opposite causes to those that produced the erudites of old, then there was too little to learn, now there is too much.

With my sincerest wishes believe me my dear Professor

Yours truly

T. Carruel

Bagnères de Luchon

31 july 1864

My dear Professor.

I had half hoped you might have been induced to cross once more the water, and come to Italy this spring, to assist at the congress of botanists that met in Florence in may. You wd have found many friends assembled there, Hooker, and Bentham, and Andersson, and de Candolle, Ball, Trinia, Weddell, Clarke, Jesso, Lehmann, Baillon, both the Moores, etc. etc., besides a host of Germans and Russians, and Italians of course there were above 260 of them in all, so that it was altogether a brilliant affair. Mr. Barlatore, who had brought it all about, was unfortunately prevented by illness from taking a part in the proceedings, he had been ailing from rheumatic fever some time

before, at present he has quite recovered, altho' a good deal broken down and unable to resume his work. I believe he is still in Florence, altho' advised to go into the country. I am myself here among the mountains, partly to rest a little from my laborious work, partly on account of my wife, who has been very ill with a pleurisy, and is slowly recovering. The rest of my family, my two boys and three girls, are all well; my eldest girl is to go with me in September next on a trip to London, it being her first voyage. I intend spending a month in London, and frequently going to Kew to study mural rare monocotyledonous types I am unacquainted with, as I am now engaged on a revision of the natural orders for the benefit of my students, for whose sake I spent nearly the whole of last winter working in cryptogamia.

I should have been very much pleased to show my garden, and collections, and micrographic laboratory etc. to yr friend Professor Gargent; but you are aware he did not come near to Nice, but stopped at Paris, whence he sent me yr kind letter of November up last year. I hope that since then you have continued well, both yourself and Mrs. Gray. I have to thank you for kindly continuing to send me yr valuable botanical papers, they are doubly useful to a botanist residing in a place like Nice, where with many advantages there is still the drawback of a very scanty allowance of books, the whole amount there is not above 1200 volumes. However in one way or another it is always possible to do some work, only with more labour and time than elsewhere. I don't know how botanists will manage it in a few generations hence, at the rate botanical literature is increasing, already it takes often more time to

DIREZIONE
DELL' ORTO BOTANICO
DELLA R. UNIVERSITÀ DI PISA

15 Novr. 1896

My dear Professor

The first 3 volumes of the Giornale botanico were sent you by Dr. Baccarini, and you must apply to him for the missing numbers (Borgo Pegolaia, 48, Firenze); or indeed I shall write to him myself to say about it. The succeeding volumes were sent by myself, after I had become the editor; the IV and V I sent by post as far as I can recollect, and will send again immediately the 2 missing numbers. The VI and VII I forwarded to the Smithsonian through their agent in Italy the bookseller Hoepli at Milan, so pray enquire about them, and if they have not been received let me know

and I shall send them again.

I don't well understand the request of yr friend the Editor of the American Naturalist. If he wishes to have another copy of my Journal besides the one I send you, in exchange for his, I shall willingly send it to him; as also all preceding volumes from the Wm. Gray let me know more exactly.

Believe me

Yours sincerely

T. Carrel

Many thanks for the continuation of yr botanical contributions.

Pisa 6 Jan.y 1855

My dear Professor

I have sent a parcel to the bookseller Hoepli at Milan, who is correspondent for the Smithsonian in Italy, to be forwarded to you, containing all the numbers of my Giornale botanico missing in yr collection. Also another parcel for Mr. Backard, containing vol. II–VIII of the journal, all that I can dispose of. I hope you will both receive them in due time, at all events you had better make inquiries at Washington, if after some time you have not received them. The ensuing numbers you will receive by post.

I believe I have most of yr botanical contributions, as from time to time I receive fresh numbers.

And now I think of it, I don't recollect if I have sent you my book on the bot. geography of Tuscany; so I forward it by post; and if you have it already it will serve for any botanical friend of yours.

Pray remember me respectfully to Mrs. Gray, and believe me

Yours sincerely

T. Caruel

Pisa 13 Nov.r 78

My dear Professor

I am truly sorry for my own sake that so competent a judge as yourself cannot conveniently peruse my book. As in many respects I have ventured on a revolutionary path in morphology, I shd like to have my particular views better known, as I feel confident that if not all at once, but eventually and by degrees they will make good their ground. Do you think I could find in yr country a proper editor for

dearful. Believe me

Yrs faithfully

T. Carnel

an english translation, that could be made known in America and England?

To-day I forward by the Smithsonian a parcel for you, containing 7 numbers of my journal, the missing ones of vol. V, VI, IX, X. Of vol. IV I have only a very few complete sets left, and cannot break up one. Vol. I–III are in the hands of Dr. Saccari, the first editor, who I believe is now in Sumatra. You need not trouble yourself with the payment; but shd you have a spare copy of yr recent Flora of W. America, I shd gladly give it in exchange.

From America I receive regularly the „American naturalist," and have received last year's vol. of the „Proceedings of the Academy of natural sciences, Philadelphia," but no other periodical. I sometimes suspect great irregularity, or worse, from the correspondent of the Smithsonian in Italy.

We are all well at home. My eldest son, one of the little boys you saw in Florence, is at the naval school at Naples; the other is in college here, and seems like his brother more bent on a military career than on a peaceful naturalist's life. I hope your own home is as

R. ISTITUTO
DI STUDI SUPERIORI
IN FIRENZE

MUSEO
BOTANICO

31 August 1881

My dear Professor Gray

A few days ago a package was forwarded to me, containing a set of some of yr works for our Botanical Museum. I need not say that the gift, as valuable as it was unexpected, is gratefully accepted, and will I hope be turned to good use. I am not aware whether you have all the works published by Parlatore; if not, we might present you with some, viz: the Flora italiana, the voyage to Scandinavia, the monograph on Colony;

With best regards believe me

Sincerely yrs

T. Carmel

R. ISTITUTO
DI STUDI SUPERIORI
IN FIRENZE

MUSEO
BOTANICO

16 Septr. 1881

My dear Professor

I answer immediately yrs of the 12th., and am very sorry not to be able to give you any but negative answers to yr questions. Sisyrinchium does not grow in our neighbourhood, & have never seen it living, and a careful examination of the Italian specimens has not shown me ~~the~~ anything like the peculiarity you mention. As for Asclepias subulata, it is not to be found in L. Webbianum, and I surmise that it may have been taken out when the family was under revision by Decaisne,

and must be looked for in Paris.

I am not aware whether Sir Joseph Hooker has told you anything about my private herbarium, which I wish to sell; and he wrote to me he would mention it to you.

Believe me

Sincerely yrs

T. Carrel

of A. nigrum had obtuse points extending out half an inch from the middle of each of the three large lobes, but not from the obtuse angles or shoulders of the lobes, while the leaves of A. saccharinum have such points, not only from the middle of each lobe, but also from the angles. I find no mention of this difference in any book. The books say that A. saccharinum has its leaves pubescent or tomentose below. Those of A. nigrum are not, but when you look up through them toward the sun they are beautifully translucent. I have not found A. saccharinum in Kansas except in two or three eastern counties. A. nigrum not at all native in Kansas, but here it is very common.

1

Excelsior Springs, Mo.
July 5, 18[illegible].

Sereno Watson, botanist,

It seems odd that I can not call you Prof., but I have not known you to be so called.

A few days ago I received from you a pamphlet about new species of plants found in the U.S., Mexico and Guatimala, for which I thank you much.

I was born in Massachusetts in 1809, graduated from Yale in 1832, came to Kansas in 1856, taught Natural Sciences in a baby University 1863 to 1866, and about 1869 became by request and election botanist of the Kansas Natural History Society, now Kansas Academy of Science. My first report was made in 1871. I used my eyes about home, which

marshes and is now in Leavenworth Kan. I am here 25 miles N.E. of Kansas City, only for the summer. Several friends sent me the plants of their respective neighborhoods, — more than any other, your brother Dr. L. Watson of Ellis. I had them to dig out. Many were not in Gray nor Wood, and those I sent to be named to you, or Prof. Wood, or Mr. E. Hall of Ills. At length I had Porter and Coulter. By 1896 I had about 1080 species. Since then the number has gone up to near 1900.

Profs. Gray and Wood, Mr. Hall, and three of my Kansas correspondents will help me up more. I have not heard from your brother in some years. So much by way of introducing myself.

I want to enter my protest against reckoning what I call a distinct species as only varieties of the same. I think Mr. Gray has sometimes been mistaken. And, if Mr. Wood agrees with him, I suppose it has been only because Mr. Gray has been regarded as authority in such matters more than any one else.

Eaton and three or four editions of Wood give us Acer nigrum, black maple, as a distinct species. Wood's later books and Gray's give it as a variety of A. saccharinum. In Watertown N.Y. the two are about equally in use for shade trees. I had opportunity to observe them carefully. I never saw intermediates, which I think I should have done, if they had only been varieties. The bark of A. nigrum was always darker. The leaves

I knew not what to call it. I sent it to Prof. Dewey and he said it was V. aestivalis. I saw afterwards in the Massachusetts report that V. aestivalis became smooth in the fall. The books now say smoothish. I think Dr. Engelmann was right, and V. aestivalis and V. cinerea are distinct.

Mr Gray makes Physalis lanceolata, P. Pennsylvanica and P. hirta all one species. I have seen and observed closely all of them and many times. I have not noticed in P. lanceolata and P. Pennsylvanica any difference in the flowers or leaves. But P. lanceolata never grows only about 1 foot high, soon leaves over, is puberulent, blossoms early in May or June, in fruit has its envelope in the shape of an oval fashioned junk bottle.

July 9. Business and weariness have interrupted my writing.

If Mr. Gray has made mistakes I think it has been because he had before him only dried specimens, when, if he had had abundance of growing ones, his judgment would have been different.

Polygonum erectum has been counted a variety of P. aviculare. I have seen the former growing up through a patch of the latter, and I never saw a specimen that looked doubtful. P. aviculare is always brownish, P. erectum, light green.

In Eaton of long ago we had Amaranthus albus and A. Blitum. Then A. Blitum was missing many years. Dried specimens could hardly be distin-

guished. There was a slight difference in the bracts, but the leaves could scarcely be distinguished, except by a slight difference in the tint of green. But A. albus had an erect stem, branching from the base, cone like, with a woody structure, rotting off in the fall, and being blown about against fences, and called tumbleweed. The other had no woody structure, spread out on the ground like purslane, and, when frost came, was killed and soon rotted on the ground. I see that recent books have A. blitoides, which I suppose is a reversion to A. blitum.

We had long ago Vitis cordifolia and V. riparia as two species. For many years the latter has been regarded as only a variety, or the former. I have found the latter very common in Kansas, but never saw the former but in three places. Here it is common. The books say V. cordifolia ripens its fruit late in the fall. V. riparia ripens in August and has very pleasant fruit.

When I came to Kansas I took V. V. cinerea for V. labrusca, the under sides of the leaves being so similar. But the fruit was small. I think Mr. Carey made it a var. of V. aestivalis, but at length deferred to Dr. Engelman, who thought it a species. It is tomentose below the whole season. In 1884 I found in Steuben or Yates Co., N.Y., a grape with leaves varying, sinuate or not, but smooth entirely and bluish beneath. The books said V. aestivalis was rusty-cobwebby below, and

glandular pubescent. The taller I think is not T. pilosa, for I have had one from W. Kan. that was pilous all over, and suppose that is the one entitled to the name. I have watched the other two to see if I could find any other difference. I think the smooth one is taller, more branching, blossoms later and is glaucous, but can not say that the difference is constant. I think the one with glandular pubescence might be called T. inter media.

If it gives you any pleasure to read what I have written I shall be glad; for it is all that I can do at present.

Yours truly,
J. H. Carruth

This is a longitudinal section for shape and size.

The base is always a shallow hemisphere.

P. Pennsylvanica grows about two feet, or at least 2 inches high, always erect, branches begin half way up, always smooth, blossoms in July or later and has its envelope always about truncate at base or a little rounded outwards thus:

I believe they are two species. I have not seen an intermediate.

P. hirta is one that I sent to Mr. Carey. He is certainly wrong in putting it with the other two. It resembles much more P. viscosa or P. pubescens, but differs from them in that the leaves are entire, approaching rhomboidal in form,

and the blossoms are always all yellow. Were I at home I would try to send you specimens.

I find a Physalis in Kansas which agrees well with P. angulatus Dun. briefly described in Wood's Botanist and Florist. I have seen no other description. It is pubescent and the flowers are all yellow and very small. The plant is broader than high and the leaves about two 1½ inches long.

In 1879 I found near the S.E. corner of the state a grass agreeing well with Triaenopis stricta in Wood's Class book. I find that name nowhere else. Has it got another name? I have found your Bibliographical Index in the K.S.U. library of great value in giving me the changes of names. I need the coming volumes.

Notwithstanding Rhus toxicodendron and R. radicans differ so little in leaves and fruit, I can not believe they are the same species. If they stand erect when they had nothing to climb on, and always climbed when they could I might believe. I can not see why species may not be distinguished by other things as well as by the arrangement of their flowers and the form of their leaves.

I think all the books I have seen say several species of Aesculus have leaflets 5-7 but Ae. glabra leaflets 5. It is common here and in Kansas, and like the others has leaflets 5-7.

We have in Kansas Tradescantia Virginica with pedicels and calyx smooth, and another on the same with pedicels and calyx

British Museum
15 Nov 1870.

My dear Dr Gray,

Dr Bennett has resolved to resign his position at the Museum, and he is doing what he can to secure my succession. Mr Jones, the principal Officer in the Museum, also gives me his cordial support, — and there is not I believe any other candidate — but as the appointment is in the hands of the Trustees, Mr Jones & Mr Bennett consider that their hands would be strengthened by Yes this vacation. The honour you did me

I trust Mrs Gray is well — I desire to be kindly remembered to her.

Begging you to excuse my troubling you more

I am my dear Dr Gray
Yours faithfully
Wm Carruthers

in the proposal you made me some months since is the best testimonial I can have received or can expect to receive — but as that is not presentable to the Trustees I am going to ask you if you will favour me with a testimonial.

Mr Bennett is within a few weeks of 70 years of age he is still very well — but his month's holiday in the Country has done him much good; and he has decided that it is better to secure as far as possible good health, by a permanent residence in the Country. It is I know influenced by his kindly feelings towards me also.

I hope you have deemed before this a suitable colleague. Of course this unexpected change in such happy circumstances greatly reconciles me to what was to myself a serious self-denial in deciding to stay here. It is a great pleasure to know that death is not making the way for me. I trust that many years of active life are yet in store for my best friend Mr Bennett. I know I shall benefit from his counsel as long as he is able to give it.

British Museum
4 Oct 1871

My dear Dr Gray,

Will you permit me to introduce to you Mr J.C. Melvill, a student from our Cambridge, who has devoted considerable attention to Botany, and who has made some important observations on our British Flora.

Believe me ever
Yours faithfully
W. Carruthers

I have not seen any thing of the fate of the section of the Wellingtonia, which you were so kind as to tell me of through Prof. Agassiz. I hope it has not been made into firewood.

Believe me Ever
Yours faithfully
Asa Gray

Prof. Asa Gray
&c &c

British Museum
23 April 1872

My dear Dr Gray,

We have looked over Nuttall's herbarium, and can find only "Melica *poaeoides" from St Diego. On comparing the spikelets from Gambelli plants with it there can be no doubt that it is quite different; but you will be able to determine this for your own satisfaction, as I enclose a specimen of the Melica, which can be easily spared from the large sheet specimens we have.

We have not been able to find a 'Poa * melicoides'.

Many thanks for Wright's letter which you enclosed. It is very desirable to secure for our Herbarium collections that have been critically named, and the list been published — even though the collections add little to the number of our species.

I shall also be very glad to have the set, as good as possible, of the Ferns I can plants you are now engaged with.

I wish I could give you some return for all your kindness.

I have a few papers laid aside for you which I will forward in a week or two when I get on that I am at present engaged with printing.

I desire to be kindly remembered to Mrs Gray.

Mr Bennett continues well — but he has completely shut himself up in an inaccessible country town about 40 miles from London.

Dr Gray is remarkably well, attending to duty every day, but I regret to say that Mrs Gray is not at all well just now

12 Dec 1873

My dear Dr Gray,

The lady you introduce in your letter has not yet made her appearance here — we shall be glad to help her in any way we can when she does come.

I send you my papers on Protostipites, and one or two others which I fancy you have not had copies of. I have been much disturbed at the position I have been placed to form the supplementary volume to Lindley & Hutton's Fossil Flora, which has just been reproduced here in fac-simile by Quaritch. It was almost out of print, and scarcely to be had.

I hope Parlatore may be able to persuade you to come to Florence next year, and we may have the pleasure of seeing you here.

I cannot go — but my colleague Dr Trimen intends being there.

With kindest regards to Mrs Gray believe me

Very faithfully yours

Wm Carruthers

Dr Bennett is not at all well. — Dr D. Gray can sing wonderfully well

compelled to take up in relation to Dr Dawson. The efforts I made in correspondence to put him right, and the way he used these efforts made me write strongly, so that he might understand my convictions of his errors, if he was not able to take in the reasons for these convictions.

When he was in England some two years ago I saw him frequently, showed him my specimens and examined his — pointing out his errors of observation, but I never got him to appreciate my objections to his views. One evening at Lyell's I got Dr Hooker to tackle him on some of his views, but Dr Hooker speedily left us, and when I afterwards expressed my regret Dr Hooker said it was no use in keeping up a talk with one with whom he had no ground in common —

I am very much delighted with your address on Sequoia, and have to thank you for the copy you sent me.

I hope in the spring to go to press with my Lipodproris of the British Fossil

CROMWELL ROAD,
SOUTH KENSINGTON,
LONDON, S.W.

1 May 1882

My dear Dr Gray

I am sorry I cannot help you out of your Straits in regard to Gilia multiflora, Nutt. I cannot remember your noticing any of Gambel's plants in Nuttall's Sertularia — nor can Mr Britton — and certainly this is not among them.

And Mr Britton's enquiry in to Silphium is

not much more satisfactory.

Mr Bennett did not notice Brush's S. reticulatum for he has not marked it in the Prodromus. It may have got early named and placed in another genus, where accident only will discover it.

I am very much obliged for your remarks of this kind. I hope before long to mistake the duplicates, and to see what will be of interest to you.

I am get busy with my public room, but am getting it into shape.

Sincerely & faithfully yours

Thos Jannettius

P.T.

In one of the Journals I noticed an advertisement that some of Dr Gray's papers could be had at the Herbarium. I would be very glad to purchase any of the following. I give the numbers from the Roy. Soc. Catalogue of Scientific papers.

10 I.46	57 V.146	71 VI.55	92	
17 II.153	60 V.190	72 VI.56	93	
19 49.397-398	61 V.321 VI.37	73 VI.77	98	
[37]	62 V.314	81 S.9.38	104 VIII.365	
51 IV.363	65 Phil.'62	90 S.9.45-49	105	"
56 V.114	66 mainly			

Besides these and later than them I do not know whether we have any gaps. I will give you a list of what we have –

Botanical Contributions –

published	May	1874
	Dec	"
	April	1875
	Jany	1876
	Dec	"
	April	1878 < Aug 1877
	Sept	1880 < Oct. 79
	June	1882
	Oct	1883

over

Species of Oxytropis read May 1884

Botanical Contr.

published January 1885
May 1886

Violets Oct 1886
Dodecatheon 1886

Bot. Contr.

published March 1887
April 1888.

I would be glad if there are in complete to acquire any to make up our deficits.

W.

CROMWELL ROAD,
SOUTH KENSINGTON,
LONDON, S.W.

22 June 1882

My dear Dr Gray

Mr Britten is away on holiday – I put your enquiry into the hands of my colleague Mr Fawcett who takes charge of the Compositae – He has sought out the plants, and made a note on them which I enclose – He pointed out to me the points to which he refers, and I agree with him that Chapman's plant is another species.

We fortunately are able to send you a specimen of Regel's plant – Would a

set of Regels plants be of any service to you?—

Dr Freeman has just returned for a short holiday of six weeks. She is looking very well—

With kindest regards believe me ever faithfully yours

Wm Carruthers

by Chicago to Winnipeg — going west as far as we could comfortably in time for the Montreal meeting —

If you would let me have any information about the length of time your American Association lists — and the plans for the western expeditions I would be very much obliged. The Linnean Society has appointed me a delegate to your association.

I am much obliged to you for taking charge of Mr Lemmon's parcel for us. He has been making enquiries

BRITISH MUSEUM (NATURAL HISTORY),
CROMWELL ROAD,
SOUTH KENSINGTON, S.W.

12 June 1884

My dear Dr Gray,

I am very much obliged for your letter and its kind invitation. I fear I will not be able to visit Cambridge except on my way from Montreal to Philadelphia. I want to take advantage of the trip that I understand is being organized under your American association for visiting the Yellowstone Park & the Yosemite valley — and to enable me to do this I

propose to see something of the interior of Canada before the Association meeting at Montreal -

My elder son will accompany me - and two friends, one an enlightened English landlord & farmer who has been lately laying down a good deal of his land to pasture, - and with whom for some years I have a good deal of intercourse - he wants to see something of the Cattle ranches of Canada - And I would also like to visit one or more of the Land and agricultural Experiment Stations in the United States - I have for some years acted as Consulting Botanist to the Roy. Agricultural Society of England, and the work has so developed lately that I think it would afford a very good prospect for my son - He is fond of Science, and I am anxious he should have this opportunity of seeing what we are able to see of America -

I have taken out our berths on the Bothnia - Cunard Line - for the 2nd of August, and I thought of going right on

BRITISH MUSEUM (NATURAL HISTORY),
CROMWELL ROAD,
SOUTH KENSINGTON, S.W.

about it, and I was expecting to hear from you about it.

I will get the Accountant to send the Order for 7/2 the overland carriage of the parcel.

I am very glad to hear of the completion of the last part of your N. American Flora, and heartily congratulate

you in being able
to carry on to completion
this important work
which has been so long
before you.

Sincerely yours
Wm Carruthers

Dr Asa Gray

BRITISH MUSEUM (NATURAL HISTORY),
CROMWELL ROAD,
SOUTH KENSINGTON, S.W.

15 Sept 1885

My dear Mr Watson,

I have, through the introduction of Dr Gray, had a visit from Mrs James — She offers me the Mrs Herbarium of her late Husband for £200. She has been able to tell me precisely what is its nature and extent — but she says she is sure you will give me some idea of its nature, as you have

you could give me some idea of the Herbarium I would be very much obliged —

I was very sorry to hear that you had a serious attack of fever when you visited Mayo — I hope this did not interfere with the object of your visit, and that you are now completely recovered —

With kindest regards I am faithfully yours

W Carruthers

S. Watson, Esq.

Carruthers

Gone through it -

Our Moss Herbarium was very poor till we purchased the collection of Wilson, and then that of Hampe - Wilson's was specially valuable for British mosses, but it contained also large collections of exotic specimens - Hampe's was an extensive collection carefully named, and admirably arranged - This is now being mounted & incorporated: it has a good representation of American species - for instance in Dicranum we have all the species but one of Lesquereux & James' Manual. I would not care to have a great series of N American specimens representing such localities - that might be interesting in one of your institutions, but not to us - On the other hand there may be besides the N States collection, many others of much greater value to us - say your government expeditions - or specimens from tropical America. If without taking up much

BRITISH MUSEUM (NATURAL HISTORY),
CROMWELL ROAD,
LONDON: S.W

14 April 1886

My dear Dalgpay,

I am able to send you what is better than a tracing — a specimen of Menzies' Caltha.

I lately discovered the remains of Menzies' herb in the Free Church College, Edin: where it was of no use — and I secured that the whole should be sent to the Museum in return for

a natural collection of British Plants. There are a few Phanerogams in the materials thus obtained — though they are chiefly Cellular plants — and among them is the Caltha. I propose to go over the whole of the Phanerogams and set aside the duplicates for you — and as an Earnest I enclose the Caltha.

With kindest regards to Mrs Gray believe me Ever faithfully yours

Wm Carruthers

HERBARIUM OF HARVARD UNIVERSITY,
BOTANIC GARDEN, CAMBRIDGE, MASS.

Feby 13th 1890

My Dear Mr. Carruthers,

I take pleasure in sending for your library at the Museum a copy of the new edition of "Gray's Manual". The territory covered is extended west of the Mississippi to the 100th Meridian, and the book therefore gives the flora for about a fourth part of the United States. Dr. Gray's principles are adhered to as closely as possible, and the nomenclature will accordingly now be found in accord with that of the Britton &

otherwise from the British Museum. In the course of your acquisitions from various regions do you not leave many duplicates which might be of value to us and which under your regulations we might be able to secure to our mutual satisfaction? I am especially desirous of having as full a representation as possible of Tropical & South American, Arctic, and Antarctic plants, and if we can help each other in this or other ways I am sure of your willingness. I shall be glad to hear from you regarding the possibility of some arrangement to this end.

With sincere regards I am

Yrs. very truly

Asa Gray

Gneum school of "reform".

I am expecting soon have an assistant in my work here, so that I hope to be able to give my time mainly to the "Syn. Flora". He, is a young man of considerable ability and promise, who graduated at Harvard and has since been continuing his botanical studies in Germany. Mr. Robinson ~~in Mille~~ will pass through England on his way home, probably next month, and will visit your Herbarium. I should be glad to have him see the working of your establishment and become acquainted with you yourself and the other practical botanists of your corps. Any attentions of this kind that you may be able to show him will be fully appreciated. I would thank you also to put him in the way of seeing the British Herbarium by a note of introduction to its enthusiastic guardian.

There is some promise of an enlargement of our Herbarium fund so that we shall not be so cramped & restricted in available means for increasing our materials. I think that this Herbarium has never received much by exchange and

BRITISH MUSEUM (NATURAL HISTORY),
CROMWELL ROAD,
LONDON: S.W.

27 Feby 1890

My dear Dr Watson,

I am much obliged for the copy of the new edition of the Flora which has arrived safely to-day. I am glad you have extended the area, including more of the distribution of the Jam flora which Dr Gray dealt with.

In regard to our duplicates — I will be very glad indeed if any of them would be of service

I was very glad that at the last meeting of the Council of the Linnean Society we unanimously agreed to recommend you for Election as a Foreign Member. The Certificate remains suspended as in the case of an Fellow, and when the election takes place you will receive the official intimation. This is before the time but I cannot refrain from communicating the news to you, which is specially gratifying to me as having taken place while I am in the Chair

I am with fully yours
W. Carruthers

to you.

I fear we have nothing of value from Eastern Asia. From S. America we have a good set of Gardner's plants, which if you want I would be glad to arrange for you to have for a fair equivalent —

I will let you know in the future if anything we may have — but as a rule I ask for collections that will cause us to deal with duplicates. I like a sufficient number of specimens for the herbarium and no more — Duplicates are in the way — and can be dealt with in after a report to the trustees, and authority from them. The Gardner duplicate set I got with Shuttle worth's herbarium — and they seem a very good set —

Carson

Philadelphia June 8th 1844.

Dear Sir.

I have taken the liberty of addressing you with regard to a desideratum, some which from other quarters I have not been enabled to supply. ~~and~~ I have been informed I ~~think~~ by Mr Nuttall that the Rheum palmatum grows under cultivation in the Botanic garden at Cambridge, if this be the case would you oblige me, the favour to prepare a specimen for me large enough for class demonstration, when placed on pasteboard. This must be near the time when the plant is in flower. If I can in any way reciprocate such kindness it will afford me much pleasure.

Very sincerely yours &c

Joseph Carson

No 53 - South 13th St.

To Asa Gray M.D.

Asa Gray M.D.
Professor of Natural History
Harvard University
Cambridge Massachusetts

Sierra Valley. Cal
June 29th '75.

Dr Asa Gray,

Mr Lemmon is off in northern Plumas county botanizing & when he left, he desired me to reply to such letters of his as needed prompt attention - &c

Can you send him a ream of that drying paper such as you sent last fall? I ordered it in S.F. but it is not to be found in the city & if you will forward it immediately it will probably arrive before he moves off on an other expedition.

You remember his presses are of such size that Harper weekly answer for folio's & the dryers should be the same ~~size~~ dimension.

I am Lemmons friend:

for whom you honored so highly with the Corydalis found in Big Meadows, for which I am inexpressibly grateful to both you & him —

Mark the key —

J. G. Lemmon
Truckee, Cal
Care of J. Olsen, Sierraville.

It is really necessary that Lemmon should have the paper. He lost a part of what he had in the spring — through no carelessness of his however.

Very respectfully yours
E. L. Greene

send you a copy as soon as I have an opportunity to do so. Would you not ~~[illegible]~~ indicate to me a safe appearance of sending things to you? I do not know if Dr. Flügel or Engelmann would be able to forward any parcel to you. If I can procure for you or any of your friends European plants, I should be very glad to do

I remain Dear with great regard

yours truly

R. Caspary.

112 A Potsdamer Strasse
Berlin
17/2/1856

Dear Sir.

I am much obliged to you, as well for your letter of the 18. of May 1855, as also for the specimen of Hackenworthia aureus and the seeds you were so kind as to send me. We will try to grow the plant here next summer. You are so kind, as to ask me to furnish you with a list of those plants, which I want particularly, but I think there is in fact so lot necessary; all concifera will be most acceptable to me, we have as good as nothing here of your American genera, and all will be very welcome to me. About a month hence and spring will begin with us, therefore I take the liberty of making you a proposal. Be so kind as to find me somebody in your country who will collect for me any plants, within his power, and I will do the same next year in Germany for that gentleman; I may collect in this way between 400 - 600 plants in one summer and even more. But I am going to have Berlin for Bonn. Professor Treviranus gets old and infirm and as I am one of his pupils he asked me to go to Bonn for his assistance; he wants me to do there a part of his duty, i.e. to manage the botanicum to make botanical excursions with the

studies and so on. If I shall be officially obliged to make excursions, which was not here the case, and I shall have the more opportunity of collected plants for any one of your friends, who will collect for me in America. If he has your director wishes for certain families, he may mention them to me, as soon as possible. The Flora of Brazil, which I know well, having been then a student of natural philosophy, so rich and interesting.

But I have still a peculiar desire which I am almost afraid of mentioning to you. I have worked at the Nymphaeaceae for nearly 4 years, my main property drawn to this branching, but I have seen very few of your american Nymphaeaceae, i.e. specimens, and of some species none. For instance I saw no specimen of Nuphar sagittaefolium Pursh, of Nuphar Kalmiana I should also like to see more specimens of N. depressa Aiton original specimens, as also of Nymphaea tetrapetala Mich. Nuphar advena Ait. Although I have examined this plant in a living state, as it grows well in the botanic garden of Leipzig, from which place Professor Miquel sent it to me in excellent specimens. Now I ask you if it is not possible, that you send me as soon as possible your northamerican Nymphaeaceae. It is a custom with us, that if a botanist is working at a certain family, the plants of ~~your~~ our ~~Mus~~ public herbariums as also of the private ones are readily lent to him for examination; now if you could not send me specimens of your Nymphaeaceae for keeping them, would it not be possible, that you send them me at least for examination? I know the English would scarcely do that, but we are more liberal in our customs. I just finished a memoir on the Aroideae, for which all the plants of the tribe found in the principal herbaria of Germany, were lent to me.

What a most interesting thing it must be to study your northamerican Flora in its native place. I should not hesitate to accept any situation as a botanist in your country for examining your Flora, which ~~yields~~ certainly offers certainly more chance to find new things, than the Flora of Germany, which is already so much searched. What an interesting family is f.i. that of Aroideae. And there is much left to do still in that. The relation between Orontium aquaticum and Acoraceae Nabalus Schott., which I very comprise both under the name of Orontium aquaticum is by no means clear.

A paper on the increased temperature of the flower of the Victoria regia, read by me ~~by the~~ the Academy here, too is just printed. I wish

intermedium certainly were not Nuphar kalmianum, but ~~rather~~ Nuphar intermedium Ledeb.
Now I ~~also~~ saw here in Bonn's Nuphar intermedium ~~[illegible]~~ in such quantities, that it seemed to me to be a hybrid between Nuphar kalmianum and lutetum and the question is, ~~whether~~ under what circumstances Nuphar intermedium is to be met with in North America? Or should ~~the~~ your Nuphar intermedium i.e. that found in North America be a hybrid between Nuphar advena and kalmianum? I ask you therefore to answer the following questions, if possible:
1) Are there found plants of Nuphar, bearing only large flowers (as large as those of Nuphar lutetum) with ~~fifty~~ ~~not~~ stigmas? 2) If such plants are found, as I suppose, are they identical in other parts with Nuphar lutetum? 3) Do Nuphar ~~lutetum~~ kalmianum meet with Nuphar advena in the same ponds ~~or~~, ditches or slowly flowing rivers? 4) Are there any intermediate forms between the two observable? 5) Are those large forms of a Nuphar which I determine to be Nuphar intermedium Led. as Professor Torrey gave them to Hooker & Arnott found together with Nuphar kalmianum (and advena) or separated from ~~it~~ in different ~~ponds~~ ponds?

If you should have to spare any specimens of those forms of Nuphar, which resemble Nuphar lutetum (Sibth.) or seem to be Nuphar intermedium, you would oblige me very much if you send me some, even if only for examination. I should return them with greatest thanks as soon as I have examined them.

I send you my photography and ask you to be so kind as to send me also yours and to post the inclosed letters to our cousin Miss Agassiz and to Dr. Lagelmann.

Yours very truly and faithfully

Robert Caspary

Koenigsberg in Pr.
16/2/1863

Dear Sir.

Perhaps you have heard, that I prepare a Monography of Nymphaeaceae, at which I am working already a considerable time. I have got now to a question, which I should not like to decide by the somewhat incomplete material, existing in Europe. It is the question: whether Nymphaea elegans Hooker is identical with Nymphaea stellata W. as it exists in the East-Indies and in Africa, having received more than a dozen of names, as generally any person finding a new variety or even the same plant as his predecessors, considered his plant as a new species. Nymphaea elegans Hook is exactly the same plant, which Lehmann called: poecila i.e. a form of Nymphaea stellata W., in which the stamens are arranged in phyllotaxis, instead in spiral rows as is often the case. But the arrangement of the stamens is in all species of Nymphaeaceae very manifold and if by consequence each different arrangement of the stamens should be considered a reason to declare the plant in question a new species, we should get some thousand species of Nymphaeaceae more. There exist as far as I know only two specimens of your Nymphaea ~~species~~ ~~of~~ N. elegans Hooker, originally collected by Wright in New-Mexico, in Europe, one in the

herbarium of Sir W. Hooker, the other in the herb. of Mr J. Bentham which I saw both; but both are in a bad state. The Hooker. Sir herbarium contains also an original specimen of Hooker's Nymphaea elegans, grown in Kew. Unfortunately the living plant does not any more, or rather already for upwards of 7 years, ~~not any more~~ exist at Kew or any where else in Europe. As I said I can not find the slightest difference between Nymphaea stellata W. and Nymph. elegans Hook according to those 3 original specimens, except that the seed, which Wright's specimen, preserved in the Hookerian herbarium, contains is perfectly smooth, as is only the unripe seed of Nymphaea stellata, whilst the ripe seed shows about 12 interrupted longitudinally placed rows of short hairs. Now the question is: is the seed of the specimen in the Hookerian herbarium quite ripe or unripe? Hooker may have grown his plant from other seeds, which he received besides and which were ripe. I take therefore my refuge to you and put the question to you: whether the seed of Nymphaea elegans Hooker, when perfectly ripe, is completely smooth, or if it has longitudinal, interrupted ~~hairs~~ rows of hairs? Have you cultivated Nymphaea elegans also in North America? If so, I ask you for some seeds of the plants, which has flowered at Kew.

I owe most valuable material of North-American Nymphaeaceae to Mr Eaton, to whom I ask you to be so kind as to remember me and tell him, that I am most grateful for his envoy, which I received about 2 years ago. But I lost his direction and have even not yet thanked him for his kindness. Be so kind as to send me his direction; being a young man, Mr. Eaton will have changed several times station by his direction in the mean time.

Nevertheless I am still in doubt about some questions as regards Northamerican Nymphaeaceae; several of them are of such a description, that they only can be solved in your own museum by observation of the living material. But as regards this I take the liberty of calling in your assistance.

Besides Nuphar advena and Kalmiana, which latter is the same as Nuphar pumilum Smith, many authors and formerly even yourself (Manual 1848 p. 23) speak of Nuphar luteum Sm. either so, that they consider it the same species as Kalmiana or so, that they have it as a distinct species. Examining nearly all the material existing in European herbaria, I found several large flowers of a Nuphar f. i. in Herb. Deak. – Jacksonville – Drummond 1833, with 5 (not 6) sepals, which as far as the specimens admit of judgment, could possible be really Nuphar luteum, or which seemed more probable, Nuphar advena exceptionally having 5 sepals; the leaves seemed to confirm the latter view. But I saw a great quantity of minor flowers, 40–47 mm (equal to about 1 3/4" engl.) in diameter (f. i. Herb. Hook. – Troy – Newyork – Dr. Torrey; Herb. Lindl. – Near Albany. Newyork. Torrey), which from the stigma

for me here to distinguish the varieties of your species well. The dry material or the few living specimens I saw or cultivate do not admit of this. I know from our N. alba, what a great difficulty it is to distinguish the real varieties, or to find them. As I am instantly at work about the Nymphaeaceae, I altered some what those data, which I published 1854 on N. alba. I found several new varieties such, one of a dark crimson colour of the petals like N. ortiz Pretzingh, which I cultivate ~~also~~ in the botanic garden here. I have now a splendid equinoxial, the largest, I think, which exists, and the collection of living plants is nearly complete. N. odorata I saw often in other gardens and examined it in a splendid living state at Berlin in the garden of Bossig; I have only young plants here, grown from seeds which I received last autumn by Mrs. Higgin son (Ida Agassiz), which I hope will flower next year.

The principal distinguishing marks of the chief varieties I take from morphological characters, of second order importance are colour or physiological differences, size, rate of growth and the like. In the most inner every specimen gets small or tall according to treatment. That can be seen every

Koenigsberg in Pr.
25 Rosh Septbr 1865

My dear Sir.

Many thanks for your letter of the 8th of Septbr, which I received yesterday ~~night~~.

Be sure that the bright crimson seeds, which you sent me, are unripe, therefore their crimson colour, which ~~all~~ the seeds of all species of Nymphaea at a certain time, before they are ripe, have and therefore the cupshaped aril, which is not yet grown up. As regards the species to which the seeds belong, I do not doubt, that it is N. odorata. An aril covering only half the seed and the crimson colour are no mark of distinction to any species. Gather unripe fruit of N. odorata and you will find always the aril half grown at a certain age and the seed crimson.

Your remark, that you have in Lake Ontario an indigenous Nymphaea with a tuberiferous rootstock and no aril at all! is most interesting.

i.e. as to the latter two points. As regards smell, it varies too much, to make it a mark of distinction and depends too much upon the age of the flower and the weather. Nympt. alba smells the first day of the flower very sweetly, the second less and shrinks often the fourth or fifth day. If the weather is cold and rainy it smells often not at all. But if the plants of Lake Ontario has no stalks, it will belong to an other genus. I know no Nymphaea without stalks. Have you seen the plant? I should suppose that it was a Nuphar or that some mistake was about it. I know nothing of such a plant.

You ask: what is Nympt. nitida Sims? Was I know is little. I saw no authentic specimen; it does not exist in any herbarium of Europe, as far as I saw. Mertens has it not. A plant under the name of N. nitida in the herbarium of Bernhardi, now in the botanic Garden of Leipzig, is a small N. odorata. The flower measures only 67 mm in diameter.

A plant under the name of N. nitida which I saw, but not of flower, in the botanic garden of Gent, was certainly N. odorata. Sims distinguishes it from N. odorata by its perpendicular root. Now every young plant of N. alba, grown in soft or very muddy ground, has a perpendicular rootstock even of a foot in length. Only later it begins to require a standing or horizontal rhizoma. Therefore the plant of Mr. Anderson, which had the perpendic. root could well have been a young N. odorata. The other character, that it ~~seems~~ seems to require the heat of a stove, which N. odorata was hardy, as Sims says, is given in such a doubtful manner — "seems" —, that Sims himself does not seem to have put much reliance upon it. Aiton (Hort. Kew. II edit. III 294) says: "radix coecata, apice inflexa"; this character vanishes quite away, because the rays of the stigma, or rather the processes of the carpellos change in a characteristic manner their direction every day of the flower in all species. I.e. in N. alba it is the first day of the flower nearly perpendicular, the second a little inflexed, the third ~~very m~~ more inflexed, and the fourth still more.

I am very glad, that you have set to work about your rhizomes of the Nymphaeaceae. It is impossible

day in most species or rather in all.

I asked my friend Engelmann to set about examining the varieties of your northamerican species and he seems to be also at work. He sent me just splendid drawings of Nelumb. lutea and dried specimens of Nuphar polysepalum.

Have you ~~it~~ at any means of procuring for me good seeds, which are able to germinate, of Cabomba? I should not mind any expense. The best would be to send them in wet powder of charcoal, in which way I received good seeds of Brasenia and Nym. odorata from your country. I do not think, that the seeds of Cabomba would bear to be kept dry for any length of time, without losing their germinating power.

I am this moment or most occupied ~~by~~ studying living plants of several species of Nymphaeaceae, which I received from Java and Ceylon, that I can not set about to lay before you at any length my questions about N. odorata and your other northamerican species of Nymphaeaceae. But if you permit me, I will do so

in winter, which, I am very sorry to say, is approaching quickly; after 5 or 6 weeks we may see snow already covering every thing.

Receiving dear Sir, my best thanks for your third letter of the 10th of April 1862 and the seeds of N. Olympo, which were most welcome. As I intended to answer your letter more in detail, for which I had not the time that moment, I delayed answering it to infinity.

For fixing the species of some doubtful Sphyrænaceae I took refuge to hybridising them, and all warmblooded and all passions in the open air are fond of hybrids or mongrels. The experimenting with them takes up the greatest part of every better hour, but the results are most interesting to me and I hope will become useful to the descriptive questions. I put and particularly to the physiological part of my monography.

Believe me, dear Sir, yours most truly and with greatest respect

Rob. l'Aspary

S. E. CASSINO & COMPANY,
Publishers of
THE STANDARD NATURAL HISTORY,
(SIX VOLS. IMPERIAL OCTAVO,)
AND SCIENTIFIC AND STANDARD WORKS,
BOSTON.

Dr. Asa Gray
Botanic Gardens
Cambridge
Mass

S. E. CASSINO & CO., PUBLISHERS
OF
SCIENTIFIC AND STANDARD BOOKS
32 HAWLEY STREET.

Boston, Mass., U. S. A., July 2 1884.

Dr. Asa Gray
Cambridge.

Dear Sir.

We return to you this day the copper plates of Musci & beg leave to for reproduction in same condition as when they were sent you by Messrs Armstrong & Co. We saw them this morning & they say that though the plates are necessarily curved it is only from printing from them & if they were bent back again. the same would occur when next used & it would simply make them worse by constant work

on them. They are properly waxed on & as they claim. We think in far better condition than when sent to us.

We think this explanation will be entirely satisfactory.

Yours very truly

J. E. Castins & Co

Dear Sir:—

We send in this mail copy of the new edition of the Naturalists' Directory. We trust you will make it convenient to remit for the amount of the enclosed bill by return mail. The expense of collecting these small amounts, if payment is delayed, is very large, and the annoyance to us, as well as to yourself, is much more than the small amount involved. Most of our subscribers make prompt remittances.

All subscribers from whom we do not hear within thirty days will be drawn on at sight, and we will pin your subscription blank on the draft, in order that there may be no misunderstanding in regard to the matter. Please have the kindness to honor our draft, if you do not remit previously.

Yours truly,

The Cassino Pub Co
Mass

A Conwell

BROWN UNIVERSITY,

PROVIDENCE, R. I.

1st January 1870

My Dear Prof. Gray.

Your letter of the 28th Dec. & the Address of Mr Francis came duly to hand.

I am glad that the attention of your Committee was turned to Mr. Corliss as a proper candidate for the Rumford Medal.

I have known Mr. Corliss many years, & have long been acquainted with the peculiarities of his Engine. And in the course of my Lectures to my classes on the Steam Engine in years past I have often had occasion to consult him. For fertility in mechanical expedients, for practical sagacity in detecting the merits & demerits of any new combination, for self-reliance

and a kind of conscious mastery over the resources of mechanism. I think he more nearly resembles James Watt than any other man with whom I have any acquaintance.

It has long been my opinion that Corliss Engines were equal to the best ever made.

For five or six years my attention has been withdrawn from these studies. And I cannot so well tell what has been done in that time. But I think, the remark of Mr. Francis in reference to Watt, towards the close of his paper will be sustained by the majority of competent judges.

I have no suggestions to make on Mr. Francis paper, He has stated the grounds of your decision clearly & modestly. In my opinion, of the two, he has rather understated than overstated the claims of Mr Corliss to precedence among the improvers of the Steam Engine since the time of Watt.

I am extremely obliged to you for the invitation to be present on the occasion of the presentation of the Medal.

I have been confined to my house for a few days by temporary illness. I am now pretty well restored. If I can do so without too great inconvenience. I shall be with you on the 11th instant.

I am Yours. very Truly.

Alexis Caswell

Prof. Asa Gray LL.D.
Cambridge
Mass.

900 M St. N. W.
Washington, D. C.

Dear Dr. Watson,

May I trouble you to tell me whether there is still a copy of Sullivant's "Musci Alleghaniense" which could be bought - and the price. Also the "Icones Muscorum".

Of the Mosses of the Clarence King expedition (1868) Nos. 1450, 1457, 1457a, 1472, 1472a & 1480, are not named on the labels, nor in the report, except 1450 and it has been corrected on the label.

May I ask you how I may obtain the correct names.

Respectfully
E. W. Leathead-

June 2, 1890

1116 - 4th St. N. W.

Washington D.C.

My dear Dr. Watson

Here is a message of the Bolivian Minister in addition to that you marked. A Sent a Chemical Veekers Gazette on account of its great beauty. To-day we have had an other instalment from the West and may have some thing fair - you would like better!

Do you want the Woman's Journal?

Respectfully
Ellen Mar Earthcart

March 3 - 1891.

Cattey

Camp Howard
Mount Idaho T.I.
May 14th 1870.

Prof Asa Gray,
Harvard,
Dear Sir
I am indebted to you for a kind letter and the thoughtful attention of some interesting printed extracts. You are pleased to say that I "guess" like a Yankee, which pleased me both by its wit and because I was correct in my guess. But I can hardly claim it to have been a guess since I exhausted the limited means at my command before guessing. I do not know whether I understand the request you make but I take it you ask me to make specimens of Synthyris reniformis for the Herbarium, the request comes almost

too late for the plant is now nearly out of flower, but I have found a few late blooms though not the largest size often attained, and I have tried to press them but I am not at all satisfied with the result, they are not well done, but I send them hoping they will not prove wholly valueless — The package contains 4 flower stems, 2 stems with the seed capsules partly developed, 1 last year's stem which shows the seed pods plainly, 2 new leaves and 2 year old leaves, the leaves as you know are radical, as I wrote before the last year leaves do not die until long after the plant has blossomed, but they become partially liver colored and finally die just as the seed is maturing of the next year, by this time the new leaves are well developed, The package also contains two other plants which I guess to be two species of Synthyris, one is apetalous and the other had a dark purple corolla, but the one in which the corolla was wanting had a calyx purple inside but green without, both of these species were very hairy the apetalous one the more so while S. reniformis is a smooth glossy plant throughout

I enclose the flower and leaf of a pretty orchid which grows in the dark woods here, It has but one leaf (radical) the root is a bulb and invariably is attached to last year's bulb (withered); the sack of the flower has two little spurs which do not show in this poorly dried specimen, What is it? If desirable I could send you some bulbs of this orchis, they grow in loose leaf mould on the hills among the evergreens, If I knew what would be considered as additions to your specimens or to the gardens of the University it is possible I might partly repay the pleasure and profit I am receiving from this correspondence

I am booked for a long trip into the wildest and least known part of the territory, I start with 50 mounted men about the middle of June for the south fork of the Salmon river and will be gone perhaps a month or two, It will be a very pleasant journey, the streams of these mountains are full of trout and I know more about trout catching than I do of botany, How I wish you could accompany me on this ramble in the mountains, I am, Sir,

With much respect & many thanks,

Your Obt Servant,

N. Allen

Cutler

San Lorenzo U.S.
April 20 [illegible]

Prof. Asa Gray
Cambridge, Mass.

Dear Sir;

I sent you last fall a package of the seeds of Synthyris reniformis as you requested, but as I have not received any acknowledgement of the receipt, I was in doubt whether they reached or whether you might not have found it necessary to discontinue a correspondence which was a tax upon your time without an adequate return. I moreover feared the latter might be the true reason if you silence from the poor than I feared

[illegible] in [illegible] two varieties, one a white flower entirely double in all of its parts, and a [illegible] having four distinct petals. I do not know what the orchid was. I made quite a collection of plants last summer, in the mountains but in moving about and from other causes they have become lost and destroyed.

Dr. Hennis, a clergyman of the Episcopal Church, was here a few days since and I showed him some of my specimens & he thinks that my letters and packages to you must have miscarried and that I am wrong in supposing you desired to give me a hint to cease troubling you. By his advice I send you specimens of two plants found by me which are new to me

One a little, [illegible] at [illegible] altitudes just as the [illegible] are going to [illegible] a yellow flower, the [illegible] are [illegible] were purple veined and very pretty as the dark green & lighter veins running through it were glossy bright.

The other a Frasera found only in mountain meadows where the ground was springy, almost marshy, and where there was some little frost every night at summer.

There may be no interest to you and I had not intended to send them until Dr Hennis saw them and advised sending them

Yours very truly

H. Gilley

Pendleton

[illegible] to learn the Frasera Thyrsiflora I sent you, grew & bloomed also in this. The seed of the same proved good & germinated

Cutting

Fort Lincoln, D.T.,
June 3rd 1881.

Prof Asa Gray
Cambridge Mass.

Dear Sir:

Yours of the 15th May just received; I am very sorry you did not get the package I sent, but such is the rule of a great part of the mail matter is and from this remote station, I mail today the two of your of the supposed Fraxera in a very carefully made up package and I enclose in this the violet I am sorry that this specimen is a poor one, it was gathered in point and not well taken care of. I find I have several and you may be able to say whether it is a new one although they are badly used up. Seen was collected by me in

the high mountains of the Lower Columbia River country and they are confined to such as I observed to very high altitudes growing near the line of perpetual snow. The blossom is yellow, the seeds as you will see are large but the plant is diminutive in other respects. You will be able to see that it is a stemless [illegible] or rather that the stems are subterranean.

Now about the Fraserea which is also a new one to me, I found it in a high marshy meadow in the same mountains. It was in bloom in August and judging by my experience there I should say there was frost every night in the year.

I enclose also in the paper marked "2" a little plant found in this same high marshy meadow, I think it is an orchid but I don't know, I had no glass with me and it is now so dry that I cannot dissect it and do not wish to spoil the specimen by attempting to do so.

I am very sorry that the Fraserea cordifolia did not live, I am sorry because you seemed desirous of having it and there is none about here so far as I know, indeed I have not found it anywhere except about Camp Howard Idaho, nor is there any Sanicula dimitormis about here.

I wrote to the Eng Bureau for volume missing of the 41st par (Clarence King's Report)

[illegible] I [illegible] that [illegible] and I [illegible] [illegible] in copies you put in [illegible] & [illegible] special cases.

I was very glad to hear from you again and I should be glad to send you any thing I could make it think it may be of interest to

Very respectfully
Your obt servant
S. Cooley

Dear Mr. Watson,

If this specimen comes in such a shape as to be recognizable will you please tell me what it is, you no doubt know it well, It grows abundantly on the plains of Nebraska, and is called "tumble weed" by the people from the fact that the autumn winds tear it up by the roots and send it rolling in every direction, I take the scaly protuberances along the branches to be the flowers, I think I can detect in each of them a style or pistil but I have no glass strong enough to find any stamens nor any vestige of a calyx. If these are flowers they are monopetalous, salver shaped,

with slightly fringed border, when fresh they were purplish red and had a resicled surface like that of the ice plants, But I cannot even guess or surmise where the plant belongs botanically. Please tell me if you know or can make it out.

I hope you are well and happy, and I send regards to your household

Yours Sincerely

H. Hatty.

Fort Lowaka
Sept. 22d 84

DIREZIONE
del
R. ORTO BOTANICO
NAPOLI

Delpino sends his respects to the Right Honorable General Major de Sauvage by the intermediar of the Hon. Professor Asa Gray (Harward University — United States)

30 March 1869

in the most speed respectfully

F. Delpino

Monsieur

Mr. le Professeur Asa Gray

Recommandé à la bonté
de Sir J. Dalton Hooker
Directeur du Jard. Roy. à Kiew.

par
P. Cesati
Prof. & Directeur du Jard. R. Bot.
à Naples.

NAPOLI SUCCURSALE
81
OTT
69
9 M

2 - 40

PD

LONDON
M
PAID
C
21 DC 69

Kew (Angleterre)

Royal Botanical Garden

Cesati –

A
KEW-
OC 22
69

NAPOLI
18
OCT
69
11 M

DIREZIONE
del
R. ORTO BOTANICO
NAPOLI

Oct. 6. 1869.

My Dear Sir

Your cordially & most friendly letter caught me when I was returning home from a delicious journey spent together with my family to visit the very gracious R. Park in Caserta, where so many stout and proud trees are to be admired: viz: Oaks & Pins of different rare species, a majestic Libanon-Cedrus, the oldest Camellia-tree in Italy &c.

I pray You and Madam to give my utmost thanks of Your kindness and gentle remembrance of my good purposes: because I know very well how little I deserve the gracious appreciations to my address in Your letter. But, it may be as it will belonging to my great merits towards You, it shall be to me the most agreable task endeavouring to do somewhat that may be agreed by You.

Honoured Prof.

Chas. Gray

In order to that I have already sent to the Rail-way-office a little collection of Anemone - & Ranunculi - roots, and some bulbi; here inclosed You shall find some other autographs in addition to those given precedently, with You may consider as a remeriment in facto for the very precious I have lately received with Your good letter.

In the future I'll do all it is my power ~~to~~ show You my best willingness: dried plants of Southern Italy may perhaps become acceptable too You. - It ought not to be said that, besides American autographs, specimens of the species, which were founded by Yourself, would be a very pleased gift to me. "Cochlypa Grayana - in Hb. Cus.": that sounds magnificently; do'nt You mean?

I have already sent to Maitland the acts of the R. Academ. of Natur. Hist. & Math., to be forwarded to America by the mediation of the Smiths. Institution

And now I am obliged to take leave from You; Good-bye, my very dear Sir. Please You to offer to Mr. Gray my respectfully salutations and best regards.

The heavenly Powers may escort Your truly on Your travel!

Yours true

V. Cesati

Octob. 1872

DIREZIONE
del
R.° ORTO BOTANICO
NAPOLI

My dear, very dear Sir

I am always indebted to You for Your two friendly notices of Novb. 1871 and March last, although it was my very purpose to answer You as soon as possible. However I delayed sometime because I hoped to be enabled to accompany my letter with some Mémoire, which I was there disposing for publication. But many occurrences arrived to hinder me in executing my observations, and drawing my notes during the spring, and the beginings grew heavier through the summer-months: chiefly on account of my occupations, very extraordinary too, in the quality of a President of the Neapolitain Section (a creation of mine) of the Italian Alpine Club. Then the wearyome work of Examina — near to 500! — exhausted all my time and powers till to the last passed week.

Yesterday I had the agreeable surprise to become acquainted with the son of Dr. Engelmann, a very lovely fellow, to whom I was so happy to hand a brochure about a few South-American plants; but I had also the disappointment that the printers of our two Academies have yet not sent the separate copies of other little writings of my own manipulation. These may follow later.

I am very glad that my earlier expedition was agreed by your indulgence. As to the return which you kindly intend to offer to me, I ought to confess that American scientific papers are a rare marchandise in our countries: of your many worthy, the late School-Manual of botany for the Northern States is the only specimen, which boasts our bibliothèque with.

You would greatly rejoice and oblige by sending some of the species, you have established, in dried specimens: the authentica was always a most appetible bit to me, as the very documents to the science.

I pray you instant to present my devoledgt regards to Mad. Gray and to agree the most hearty salutations

from your dev.t

Y.t Cesati

Chas Bourne

Williams College
June 27, 1855

Prof. Gray

My Dear Sir -

I think you mentioned in one of your letters that you wanted Cuscus. I am not quite certain. But if so, would not this be the best time for sending them, when so many are in print? There would be no trouble I suspect as to their living. The Astragalus I have found again this year. I enclose a flower which I have just taken from the press. I found the plant when a student in College, in company with Prof. Darby. but since that time till this Spring I have

not found it - I will send you some in the fall -

I notice that your Botany says of the pedicels of the two species of Actaea - When a student in College I found specimens with thickened pedicels but red berries - The berries were in all respects, so far as I can now remember like the white except the color - & that was pencillings of deep red - In Newfoundland I found the Actaea growing in great abundance, I saw hundreds if not thousands of specimens with both white red berries, but not a single plant with thickened pedicels. The white berries were in all respects, form, size, & seed like the red - Is it not likely that the pedicel & structure of the berry are the constant characters of the two species & that there are two varieties as to color in each species? I shall endeavor to find & find some red fruit with thickened pedicels this season - if so I will send some.

I am exceedingly obliged for your kind invitation - I shall accept it with pleasure when I am in Cambridge, & hope in turn that you will have leisure & inclination to stroll among among the hills of Berkshire, & become my guest -

Most truly yours

P. A. Chadbourne

Apalach^a Nov. 15. 1879

Dr A. Gray.

My dear Sir.

Yours of the 4th came yesterday, and also Proofs from Bigelow up to p 442. The Alabama grass is evidently of the Oryzeae group, and very near Luziola, but apparently distinct. You see I have given it a name which, if you don't like, please try your own hand. I wish you would also insert it in the Synopsis, and to do this you will have to alter the three other genera somewhat. Set it in between Zizania & Hydrochloa.

Engelmann's grass I believe to come in here also, much better than in Chlorideae, but it's such a reduced thing we can only guess at it. None of my Chlorideae come within a mile of it, but I suppose we must put it there. Suppose you place it before Spartina. I hate to trouble you for this, but my MS being in Cambridge I cannot do it myself. The character of the Tribe will have to be altered to receive it. If you prefer to put it in Oryzeae you may do so on my respon

ibility and Englemen may scold me as much as he likes. I have no time to confer with him about it.

I have been sick almost all the time since my return, and at the present sitting am not worth one of your Cambridge cents. I fear the printer will find me backward unless I feel better soon. But I have secured a basket ful of Palmetto seeds for you which I will send by the first vessel for Boston unless you designate some other course.

I want a French Microscope like yours. Can you tell me how to get it? I inclose graph &c

and remain

Ms Sincerely

A. W. Chapman

Curtis
Ct. 7

Near Quincy, Fla. July 24. 1842

My Dear Sir

Your letter of April last has been on file for a long time – I have not been able to reply before having been mostly absent from home – Of the Flora sent me I have not been able to dispose of but two copies although when ordered there were five or six engaged in conformity to the schedule sent out by Dr Torrey & yourself before you transferred the work to your publishers Two of the individuals flew off in consequence of the increase of price & the rest from the pressure of the times – Of the four copies unsold I will make whatever disposition may be deemed advisable – If there appeared any prospect of better times I should think that as they are safely here it would be the best plan to let them remain a while longer – But unless otherwise directed I will send them to Mr Pike next winter For the remaining two Copies I will settle at the same time Of course You need not in future send but two ~~copies~~ Nos. of the remaining part of the work

I suppose that you are hammering away at the Flora – It turns out to be a most unfavorable time for those most interested in its publication

I am all anxiety to see the 2d No of II Bot
Mr Curtis informs me that you have a Prionopsis
Chapmanii in it – I suppose it is that plant we have
called a Lindelia. ~~Last~~ In looking over your account
of Liatris, I do not find any mention of one which
has always appeared to me a good species & which I
have usually distributed doubtfully as L. resinosa.

I have done nothing in the way of Botany this
season – My hands have been tied with other business
I however accidentally met with the Ruellia
humistrata, Mx. which Torry Knowledge has not
been seen since the time of the old Frenchman
It is a near Kin to R. oblongifolia with much
smaller flowers than any other American species

I remain
As ever
Truly Yours
A. W. Chapman

PS I sent you a small package early
last spring & one for each of the Cary's

25

To

Dr. Asa Gray

~~New York City~~

care Little & Brown
Boston

Closed 20 June.

Southampton (Mass) June 17. 1843

My dear Sir

A few days ago I received his letter from Florida bringing with me such things as it was thought would be interesting to our Botanical friends here as well as a package for Boissier. It was with much regret that I learned that Mr Carey had left New York only a few days before my arrival to reside permanently in Buffalo

I did not forget your request to furnish you with a box of live plants but my time was so fully taken up with matters of a more pressing nature that I found it totally impracticable to make the collection at that time

The unsold numbers of the Flora I left with Wiley & Putman and accounted with them for the numbers sold as you requested I regret that I could not find sale for the whole but you know that our Florida people are not much given to "Book Knowledge"

I have with me a few new plants from Florida with full Descriptions which I thought I would send to Am. Journ. for publication But I desire your opinion on them first. Among them is a choice Carex near C. pedunculata another which may prove to be the C. collecta Dew. The Schoenus nigricans grows abundantly around Port Leon in the brackish marshes—

I collected a few things at Key West but I suppose you are abundantly supplied with the vegetation of that Island

My arrangements for the Summer are as follows. In company with my old friend Dr Alexander of Hubbardton in this State I make a tour to the White Hills. On the 20th of August I must be in New Haven since I have a daughter at school. About the middle of September I start for Florida. Possibly I may give you a call on my return from the Hills in the event of my not doing so I wish to know what direction I must give Bossieux package — It will of course go down on the Western Rail Road

I remain as ever

Very faithfully Yours &c
A.H. Chapman

To
Prof. Gray

Southampton Mass
19 June

12 pm

Prof. Asa Gray,
Cambridge,
Mass.

Quincy Florida Nov. 17. 1844

My dear Sir.

I received your note of August last in due time & have given instructions to Riley & Putnam to forward ~~them to me~~ the package you left with them to me in Quincy

While at the North last year & while you were absent on your Southern tour I left at the Express Office in Westfield, Ms. a stout package of plants to be forwarded to your address at Cambridge & designed for M. Boissier Did you ultimately get it?

I shall attend to your request to send you live plants the coming Winter - I have not had an opportunity to collect them advantageously since I received your letter - I suppose the most desirable time to collect them here will be in the month of February when they are just beginning new shoots & then you will get them in time to plant them in the open air of your climate

It will be necessary to give me directions how they are to be sent that you may get them in the shortest time possible after they are packed

During the past summer I have been engaged in the collection of Florida plants with a view to their sale in Europe. I thought I could make it as profitable as the practice of Med. & it is certainly more in conformity to my disposition & one or the other I am compelled to do. As you are more conversant in such matters than any other one to whom I could refer I wish to ask your advice on some matters

Do you know how plants as rare as our Florida species are prized in Europe & what is the usual price What is the best market for them. To what house or houses they may be consigned & any other particulars you may deem useful – I have put up Twenty four packages each of which will contain from five to seven hundred different species nicely prepared & suitably labelled & These I wish to dispose of abroad to the best advantage If I am sufficiently encouraged in the undertaking I purpose to continue the collection until I have completed the Flora of the whole Territory But as the difficulty of preparing good specimens is so great & the exertion necessary to collect them in this climate so fatiguing I shall hold off until I learn the result of this years labor.

How do you progress in the Flora. I have the numbers up to the conclusion of the Compositæ. Are there any numbers issued since – I have laid aside for you whatever has occurred to me since my last package You will probably find some new things among them

I am indebted to you for expenses paid on several packages & as I shall have funds with Perkins & Hopkins New York the coming winter I wish you to hand in the amt to Wiley & Putnam & I will give them an order on the above firm

I remain
Very Respectfully
Yours &c
A. W. Chapman.

To Prof. Asa Gray.

Prof. Asa Gray
(Harvard University)
Cambridge
Massachusetts

good specimens is so great & the exertion necessary in them in this climate so fatiguing I shall hold off until I learn the result of this years labor.

How do you progress in the Flora. I have the numbers up to the conclusion of the Compositae. Are there any numbers issued since – I have laid aside for you whatever has occurred to me since my last package You will probably find some new things among them

Apalachicola Fla Feb. 11. 1848

My dear Sir

I greatly marvel that you have never mentioned if you have received that Barrel of roots which I sent you a year ago & that I have not heard from the large package of plants which I confided to Dr Sneer for the Bost. Nat. Hist. Soc. – I drop you this note this morning enclosing a letter to Mr J. A. Lowell in which I offer him my Herbarium at such value as he may fix upon it I would give it to him if I could afford it but I am poor now & am obliged to sell it

I have long intended to ask you to assist me to some post in Boston or elsewhere which would afford an income sufficient to the support of myself & wife Four years ago I lost my whole property the result of many years hard professional labour & I feel unequal to the task of undergoing the same again I am now suffering under an affliction infinitely greater than the loss of property & I feel anxious to get away from the scene of such deep misery

I wish you would have your attention directed to this subject – I care but little what the employment may be so it be honest but would prefer some place which would connect me with objects of Nat. Hist which I have loved so long & well – I may write you on this subject again In the meantime I am as ever Yours Sincerely

A. W. Chapman

To Prof. Gray

PALMYRA COL
FEB
11
PTY

PAID 10

Mr. Lowell

Prof. Asa Gray,
Harvard University,
Cambridge,
Mass.

Apalachicola Nov 4. 1858

Dear Sir

I found last week in a pond near this city a plant which I thought might prove to be a new species of Thalia but after a close examination find it differs from the characters of that genus & even from both the Orders Marantaceæ & Zingiberaceæ in the remarkable hooked embryo

I have not now any specimens of Thalia dealbata with which to compare this plant ~~but~~ & Elliott of course in his detailed description makes no allusion to the embryo from a remark in Plant. Lindheim. I judge the embryo to be straight – It is no easy matter to describe the corolla intelligably & I have sketched it in my rough way on the first page with explanations – I call the six exterior leaves petals because they are exterior & Elliott although he takes a different view of the parts seems to describe the same arrangement

There is no mealiness on any part of this plant but the nodes of the panicle & the two glume-like leaves of the spathe are hairy otherwise smooth & shining – It grows 6–10° high the lanceolate leaves (1 ft long) on long terete petioles dilated & sheathing the lower portion of the stem the upper portion very straight & terete like the leaf-stalks The panicle consists of a few diverging branches bearing the the flowers at the drooping extremities in a zigzag spike The root is fibrous no rhizoma nor tuber – There is nothing aromatic about ~~the~~ any part except that the flowers are fragrant slightly I would like to get your opinion of this and if it should prove to be something new would suggest that it take the name of "Ravenelia" But my knowledge of these Orders is so limited that it may easily fall into some Genus of which I know nothing

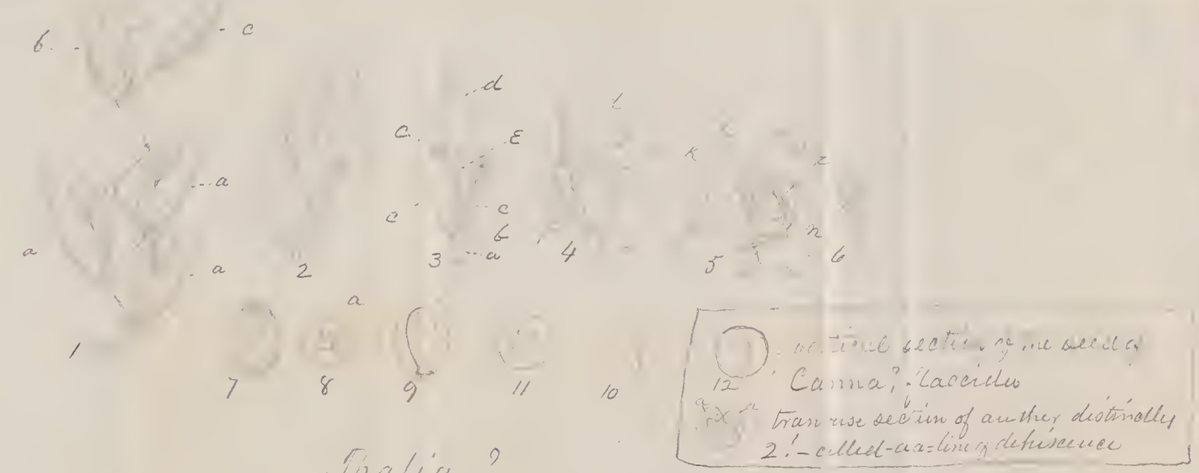
Some two years ago having a day or two in Boston I ran over to see you but unfortunately found you ~~absent~~ from home – Possibly I may see you next summer or the next following when I hope to have the Southern Manual completed – I sent a package of sequings of some oddities two years ago to Dr Torrey since then I have not heard from him Has he abandoned Botany? And what is to become of the Flora? Do you intend to go on with it?

I enclose two or three nuts of the plant for your examination

And Remain

Yours Sincerely

A W Chapman



Thalia?

1 = a branch of the (drooping) panicle the rachis zigzag – aaa the 2 unequal hairy spathes enclosing the fruit – b an expanded flower two together in each pair of spathes – c = unexpanded flower

2 = a spathe with its two flowers enlarged

3 = same the spathe ~~removed~~ & the further flower removed – a ovary – b = 2 of the minute calyx lobes – c = the 3 exterior lobes of the perianth – d one of the interior petals – e = another interior petal which is thick & rigid except the recurved summit

4 = same the exterior petals removed & lettered as no 3 – f = one of the 2 anthers bearing two bristles hollow & in the bud enfolding the style & stigma – g = the tip of another

5 = same the longer petal (d) removed & the other (e) vertically halved & the front portion removed (letters corresponding with the last) h = an a other-looking yellow hard body – k = the true 1-called anther – g the stamen back of it – these three are united below & to margin of the petal (e) n = the style which was at first enclosed in f but has now by an elastic jerk swung round spirally with its stigma resting on the fold or pouch (o) this fold is adherent to the inner side of the petal e & to the side of the anther-like body h s = the membranous recurved prolongation of the stigma

6 = a reversed view of the stamen f with its 2 sacs

7 = a seed the loose covering removed

8 = end view of the same showing the 2-lobed axis a

9 = vertical section of same showing the curved embryo!! in the midst of hard but somewhat floury albumen the radicle resting on the hilum

10 = Embryo removed

11 = Transverse section of the seed each lobe of the embryo with a pair of open tubes

When a second petal (like d) is present it is inserted on the back of h fig 5

Apalachicola March 23. 1857

My dear Sir

On the eve of his departure for Europe Dr Engelman sent me a hasty note requesting me to send you an Opuntia which grows here & direct specimens of which he had seen in Dr Torrey's Herb. By the Ship "Vandalia" Capt Anderson bound for Boston I sent about a week ago a little Shakes Box full of such plants as an icy winter had left addressed to you & "to be kept until called for" — You must therefore look out for her about the time this reaches you

On my return from the north last fall I found a pamphlet from you entitled "Statistics of the Flora of the Northern U.S." for which I am much obliged My wife who had torn off the wrapper states that there was some writing on it — Did you have any queries to make?

I have no Botanical news and
Remain as ever
Yours sincerely
A. W. Chapman

Apalachicola, April 4, 1859.

My dear Sir.

I hope, as you glance at the signature below, you will not be alarmed for my sanity, as was our good friend Mr Curtis, when six months ago he received a letter from me. But I fear I must trespass a little, to obtain some information which no one else can so well impart.

Through many discouragements, I have quietly and steadily, as leisure permitted, gone on with my Southern Botany until last Saturday when I was much gratified to come to the word "Finis". I have some Eight hundred pages of closely written Ms, one of which is nearly equivalent to a printed page of the last edition of your Manual. I have somewhere between 2500 and 3000 species. The plan is wholly yours The descriptions of the species are all my own, copying no one, when I knew the plant. My field commences where you leave it, and embraces the Carolinas, Georgia, Alabama and Florida.

Now I purpose to defray the expenses of an edition, unlesp you and Profr Torrey advise to the contrary and the information I much want is this.

About how much will it cost me pr copy, say of 700 pages, for printing and binding in muslin?

Had I best get it printed in Cambridge or can it be as well done elsewhere?

How long will it take the printer and binders to perform the work, and consequently how long must I remain north to correct proofs? Mr Curtis has promised his services in this particular, but I see not how he can well do it in North-Carolina.

As my book will be sufficiently bulky, I conclude to say very little (only a few pages) about the elements of Botany, and refer the student to the works you ~~you~~ have issued.

I have a list, of a page, of insurmountable difficulties which accumulated as I progressed, of these I wish to ask your advice, when I visit you.

I expect to reap but little pecuniary benefit, perhaps none at all; but I hope and believe the sales will defray the cost of publication. Of the merits of it others must judge, all I have to say is that I have performed the task to the best of my ability.

Pardon if I have too rashly trespassed and believe me

Yours sincerely,

A. W. Chapman.

Apalachicola Jany 23d 1860

My dear Doctor

Yours of the 11th inst came by last mail. I am glad to hear that the Obera is printing. Eaton has judging from what I see done his part finely. I will do for Bessie what you say & probably by to days mail — Now for myself

I never was more harassed and oppressed with various cares than since my return home. A vessel leaves for Boston tomorrow or next day and I will put the Palmetto seeds on it Although the Sarracenia roots can be obtained by a half hours walk they are still in the swamp — I wanted these the seeds and some authentic plants to go together.

These odds and ends of a Botany are greater botherations than I had anticipated. With this goes the Index as far as I had the means of extending it I have no proofs of pp 353 to 366 inclusive but I have inserted the names of the genera in the index Will you please place the number of the page to such names and also to Eatons Ferns after page 590 and then send it to Bigelow Is Eatons name (no. 20.) "Anemia" correct Others say "Aneimia"

I have arranged the Enocaulons according to your views although with some reluctance

so far as the Goldsboro and Ravenels plant is concerned. Although you sent me very narrow leaves of E. decangulare still they are unlike the two first named. Strange that the only form of the species I had ever seen (the broadleaved) should be the most uncommon. - Ravenel sent me the plant I asked for which proves to be a spanking new species. I have just arranged them all (E. Ravenelii also or E. bicolor if you say so) and send them with this. Is it Kornicke or Kornicke or what is the name? I send a more mature head of Ravenels plant.

Don't sell a copy to Boissier. I want to present him and a few others abroad a copy. But more of this when the fish is caught.

No more now - I hope you can make out the above.

I am always
Yours sincerely
A. W. Chapman

Apalachicola Jany 30. 1868

My dear Sir

I sent off your Palmetto Seeds about a week ago by the Bayou Glen, Capt Holmes. The roots of Sarracenia are snugly packed in a box by my side and will go by the first chance after I have added some of your other wants. — If the season would linger awhile until I get rid of the printers I would do much better by you; but our flowers are now expanding rapidly and don't seem inclined to wait the movements of authors & printers.

While out for the roots I had occasion to notice the fruiting condition of Gentiana ~~au~~ angustifol. var. I had seen this peculiarity before but supposed it to be accidental but now I find it to be the rule — If the true angustifol. presents this elongated stipe in fruit (and does it?) my pet may remain where we

all place it but if not I incline to give him a higher position in society.

I have seen the end of the Flora and am greatly obliged to Mr Eaton for the manner in which he has done up the ferns of the South – the first attempt I believe.

I shall print but 500 copies at first as I have instructed Bigelow who asks about the paper. I shall be satisfied with as good an article as your last Manual is printed on.

Do you make many (or any) corrections on the plates? I want to make some but I am fearful it won't pay

I am getting slowly along through the preliminary matter subject all the while to the most annoying interruptions which my bread & butter will not allow me to disregard As you desired I sent Dr Bessier small specimens of my species of Euphorbia but unfortunately no fruit – I guess he will find some of them in Rugel's collection

Dr Engelman visits me he has three unrecorded species within my beat Well as it costs nothing to express a wish or an intention perhaps these things will receive attention at some future indefinite period

There are three errors of proof on p 584 "palea of stamina" & "Cenecum" under L. Alabamense and the palea are both lower in Menanthochloë

I received a slip of Silliman's Journal from you by the last mail – I shall look for one one of these days with undisguised concern Nous verons

There will scarcely be a chance to send the roots under a week or so and due notice will be given when they are shipped

I remain yours always
A. W. Chapman

I sent my [illegible] last [illegible] days.

Apalachicola Mar 17. 1860

My dear Sir.

The box of live roots were shipped on board the "Barque Waverly, Capt. Thompson" for Boston, on the 24th February & she cleared in that day. She ought to arrive about the time you get this. I did not take a B/L nor Captain's receipt hence you must send word to the Consignees to look out for it. — It contains lots of Sarracenia Drummondii, few of S. Psittacina; one of Enocaulon decang. with urde leaves — One Cestrum (our night blooming Jessamine) Several Pinckneyas (and fruit on the top as you open the box) and a few other things.

A week ago I sent off to Mr Bigelow the last of the preliminary matter except Title page errata &c. which goes by the next mail & then I'll wash my hands of it

I have just rec^d your of the March 3^d. Have mercy on a poor county Doctor for goodness' sake. Havn't had two successive hours of sleep for seven nights and am in no fix for study during the day even if I have the time — However I'll be through by the next mail and be hanged to it all (hope that isn't swearing; — is it?)

I shall write you about several things after I get the dishes put away

And remain in the meantime

Yr Truly

A W Chapman

Apalachicola June 1, 1860

My dear Doctor:

In my instructions to Mr Ripley I directed him to leave out of the Boxes 25 copies of the Flora, to be left subject to further advice. I also placed in his hands, over and above his bill, 71 Dollars which I requested him to hand to you, & which I wish expended as follows

Take a copy (or as many as you want) of the Flora, have it rebound in such style as may suit you, and, with the sincere regards of the author, put it, not in the gamut with poor Eaton, but with respectable company on your south shelves.

Hire some person to carefully wrap the copies, or as many as may be needed, and let him send by mail or by Express, expenses prepaid, one to each of the following persons;

✓ Daniel C. Eaton, New Haven, Ct.
✓ Prof. John Torrey, New York.
✓ Geo Thurber, New York.
✓ Prof. C. W. Short, (address unknown)
✓ Dr. Geo. Engelmann, St Louis Missouri
✓ Rev. Dr. Edward Hitchcock, Amherst, Mass.
✓ Rev. Dr. M. A. Curtis, Hillsborough, N. Car.
John Carey, Esqr. London Eng
Dr Francis Booth London "
✓ M. Edmond Boissier, Geneva, Switzerland

There will still remain eleven copies some of which you may wish to send to <u>your</u> friends.

"Here endeth the second Lesson"!

In concluding this eventful chapter of my history, I should do violence to my feelings, did I fail to express anew to Mrs. Gray and yourself, my grateful acknowledgment of the numerous acts of kindness and sympathy, which a review of the last year recalls to my memory.

A comparative stranger to you, I arrived among you, diffident as to the value of my labors, and weighed down by a load of mental depression too deep for utterance and yet too apparent, I fear, at all times to be wholly concealed. With you and my mission was happily accomplished; and whatever of value the contents of the work may exhibit, or whatever of neatness in execution, I owe almost entirely to your aid.

Accept, therefore, the sincere thanks of

Your much obliged friend & Svt

A. W. Chapman

Arala chicola Jan 29/60

My dear Sir

I have but a moment to reply to your of the 11th inst. as our mail Boat of twice a week just comes and goes.

I am thankful for your kindness in distributing the Pieces. I dont exactly know what you mean by "These 5 I present myself" If you mean that you expect to pay for the copies. that is not to be thought of

Ever

I want, as soon as materials reach me, to get up a circular to be sent broad cast over my whole beat, and you will greatly oblige by keeping me posted as to the opinions of the Press &c – Send me what you have to say in Silliman – Glad to find you have at last found your tongue for hither to you have been as shy as a Ripley trout

Ravenel is out in the Charleston papers & in De Bow's Review.

I do not now expect to visit the North this year unless on a flying visit to N York in Oct.

Ever Yours

A. W. Chapman

Apalachicola, Sept 24. 60

My dear Doctor:

I ought to have written you long ago, but I have been so fully occupied by matters connected with my profession, of late, that no room has been left for Botany nor with anything ~~b~~ appertaining to it. – I received your catalogue in Sill. Journ. and read it with much satisfaction. I thank you kindly for your favorable opinion and believe it to be sincere. You slap me a little upon the Analysis, but you will not find it so faulty as you suppose. It will of course have to be corrected, but my own opinion is that it is the best part of the whole concern.

Lindley comes out flat-footed
don't he. "Among the foremost ranks"
Make way, my dear Sir, for your
equal,— In sober earnest these favor-
able notices afford me great satis-
faction; the more so, because my
own opinion of the work was by no
means very exalted. Under all
the circumstances I performed my
task to the best of my ability, and
there I let it rest.

I have in my Herb. from Illinois,
collected by Holten & sent by Mead,
a little fern, probably a Chilanthes,
which does not appear in your
Manual. Make a note of it, and if
you have no specimen, let me know.

I am very busy and have no
time for further words but
remain

Your Yours
A. W. Chapman

P.S. I shall send you & Eaton
each a small package of plants
when the shipping northward com-
mences— How do the live roots
succeed? Did they live? Did
you see that Eriocaulon (in the
box) with leaves an inch wide?
If at any time you want any
scrap for examination found with-
in my region command me
freely

A W C

men, that, after the southern States have retired from the Union, some reconstruction of the terms of union may be brought about which may prove acceptable to all the states. Both sides are destined to witness great distress, even if we separate peaceably. In my opinion, neither the North nor the South are responsible for this state of things. The curse will ever rest upon the detestable Democratic Party.

In the hope of better days,

I remain yours truly,

A. W. Chapman.

Apalachicola Dec. 8. 1860

Dear Docter

Your of the 30th ult is just received. Carex Mitchelliana, you see, I copy from Curtis, in whose H.b. alone I have seen it. I have no specimen. C. Carolniana, I received (a very poor specimen) from Buckley. I can let him (Booth) have it if nothing better can be done.

Not a single nut of Palmetto is to be found hereabouts this year. It would seem that they do not make seeds every year. I knew long ago that the Saw Palmetto acted thus for I have not been able to get the ripe fruit of it yet.

I'm only tolerable, thanks, how are you?

I don't know how Irisen the are getting on with my Flora; there that I had

sent to me (200 copies) are nearly all gone. But the times are so badly out of joint now I do not expect any further demand until the storm has passed and a new order of things is inaugurated.

It is hard to think of but we are certainly breaking up. No power on earth can keep us longer together. The only consolation for quiet men is "The Lord reigneth". Reckless politicians on our side & wild fanaticism on yours have done the business effectually. Whether the Northern States repeal their obnoxious laws, is now a matter of no such consequence as most of the northern papers seem to suppose. The Deed is fully determined on and will be consummated with the hearty approval or acquiescence of three quarters of the entire population of the South

Dec'r. 19

Since writing the foregoing, I have received yours of the 6th with the enclosed. If you correspond with Buckley perhaps you could get a specimen of Carex Carolniana for Boott from him. Curtis has two remaining specimens of C. Mitchelliana in his Herb. & perhaps he would spare or loan one. The other requests of Boott I will attend to, in a small package which I have nearly ready for him. The Vol. of Illustrations please wrap securely and send by Express, via Columbus, Georgia.

You have long (too long) heard what the Northern pulpit had to say touching the moral aspects of Slavery. Please see what one of our most eminent Southern Divines thinks (in the Pamphlet herewith sent).

I feel so sad! You can't help us now; it is too late. There is a hope, a very faint one indeed, among honest

Apalachicola Feb 9. 61

My dear Sir

Yours of the 31st Dec. came safely to hand and in due time Booth's volume which I suppose you intended to announce but forgot to do so. Thanks for both.

About a week ago I started off a Box of plants for yourself, Eaton & Dr Booth, by the Bark "Col Ledyard", Capt Sutton for Boston. I intended to pay all charges at this end but the lighter left the wharf unexpectedly and I did not take Bill Lading

I offered the freight to the Consignee but he refused saying no charges would be made for it

Eaton will advise you about his packges and the one for Dr Booth I entrust to your care to send it to him

Will Dr Gray send me by letter a specimen of the Cases referred to by Dr Booth (Part II p. 98, sub C. Pennsylvanica) gathered on Roan Mt. N.C. I want to settle this botheration, if possible.

I do not reply to your views of the state of things because there is alas now no need of comparing notes

There is a strong minority in all the Southern States most bitterly opposed to all these wild schems, but we are powerless. As to myself I shall patiently wait ~~mac~~ until the smoke of the conflict has vanished & then try to find where the flag of my country waves (if indeed it shall wave any where) and there endeavour to find the brief repose which awaits me

Whether that will be in the North or in the west remains to be seen

I do so much regret to be compelled at my age to begin life anew, amidst strange faces.

Ever Yours

A.W. Chapman

New York 27 Nov. 1865

Dear doctor:

You do not know you never can know how much joy your letter of Sept gave me It was kind in you to send me at such a time such a friendly letter – A hundred thanks.

Very unexpectedly to myself I find myself here having reached the city last Thursday. I have seen (Saturday) Dr. Torrey for a few minutes & to day Dixon & Co who paid me. as you requested them to do. Thank you kindly. I brought with me the Leitrenia you asked for and will send it by Express when I mail this. And I will ask you to send the copy of Booth's Carey by Express to the Care of "D.W. Chapman No 825 Broadway. N.Y." I want to see most earnestly but at this season I do not much fancy the trip & aim to leave for Aiea early next week. I did not dream that so many copies of the Flora (of Rebellion)

could have been sold during these years and hope it may prove to be a commencement of better things

The plants you want from me I will most certainly send you if I can find them in my region.

I write this ~~under~~ in the midst of a Babel of confusion on every side and please excuse brevity

Ever Yours

A. W. Chapman

Chapman

Apalachicola, Fla. 9. 66

My dear Doctor.

I have written you some half dozen letters in hope of finding some chance to send to you and they are still on hand. This I hope will go on pr str "Linda" which sails tomorrow.

In the last received from you you express an intention of making a trip to this place in company with Mrs G. Nothing could please me better. My house, my room, my den my bread & butter in short everything I can command to make your visit comfortable & pleasant shall be at your service. Now when shall it be? April & November are our most pleasant

On reperusing your last letter I find something more. The Reconstructed would hardly hurt a Yankee without money in his pockets and as Botanists are not usually accused of an excess of the thing I reckon you and I would be safe on that score. The rascals are bitter as ever. I see you want to cruise along our River banks. April is a bad time for that as I said on the other page. But perhaps the season may fit. Office work takes up my whole time just now but later I hope to be more at liberty

If you send the seeds from Australia I will see what can be done with them but how about a Palm that grows two feet in forty years!

Engelman has turned up on Comf & Francis Glad to hear from him — Remember me kindly to Mrs Gray wrap her warm and both of you come away from that unpleasant Sabbath and healthful climate & spend a good time with Your

A M Chapman

months per Mrs Gray and as good for you if you wish to see my pets in situ. But Oct & Nov. are the best because the wood and swamps are dry, and the River low, so that the cliffs along the banks where ferns & mosses abound) are exposed.

But come anyhow and when you please only let me know & be prepared. If you come by sea take the New York Steamers – if by Rail take the route via Washington Lynchburg Va, Knoxville Tenn, Atlanta & Columbus Ga. You can or could when I was there) check your luggage to Atlanta, from thence take your ticket to Columbus via Greenville. From Columbus to Apalach take the River Steamers. Cost from N.Y. to Atlanta about 40 (I think) from At to Col say 8 from Col to this place say 20

I came by way of Albany, Buffalo, Louisville, Nashville &c and it cost me twice as much and a heap of annoyance which was unavoidable. So come on and I'll have a cup of tea ready – Alas! where are my lady friends to welcome Mrs G. – all scattered to the four winds – scarcely one remaining. But will do our best as far as possible.

I collected at Eufaula good plump seeds of Bignonia capreolata which I put into a package for Thurber to go by this same chance requesting him to send them safely.

Send by mail and although we have no reconstructed mail still the letters get here sometime usually in about 20 days. A pamphlet from you came yesterday

Apalachicola Feby 9th 1866

My dear Sharber

At last and under much difficulty I have got together a set of my Grasses as I promised you at your rooms. I intended to have laid them all out before you as I understand there but want of time forbids at present (this confounded office keeps me hot) I have done the next best thing having set off duplicates of exactly the same forms numbered them and carrying one for myself and the other to you. Be careful not to put any of the numbers mis placed — run the eye through each of them so that we may understand each other in the "good time coming" I dont pretend to say that these numbers represent species or even varieties but they show the contents of my Herb in undetermined materials (Lest I forget there is a fragment of Rottboellia corrugata among the Andropogons which I do not remember to have labelled) Perhaps we had better keep Ell's name "Andropogon Vaginatum" although the specimen in Herb. Torr and his description clearly refer to a form of A. Virgin, but I suspect his Herb. contains the real thing (Vide Curtis Reports Wilmington) & I had called it A. spathaceum: A. decipiens Ell ("Common Broom-rush") and probably Michx, as he has no A. Virginicus, is the I take it A. Virgin Linn. A. tetraslachyum Ell & Curtis appears to be the same thing, but is not what I

mean in "Flora". A. argentenus the we all know being the very brainy one of this group. This settles Elliotts hash

Now there other forms hereabouts. The ordinary form of A. macrourus, we all know, but there is a form with long-sedicated spikes – one smooth all over with scattered spikes, and the var glaucopsis Ell. This seems strongly to suggest to what I call A. stenophyllus, (A. gracilis Carpenter) & also to glaucous forms of A. virginicus. But all these have few-flowered spikes (8–12) a character more constant than one would suppose

There are three more A. xanthostachyus (A. tetrastach. Ch.! Sf.) A. longiseta, A. tetrastach. var distachyus, Ch.! Sf.) and a species in Gray's Herb (A. brachystachyus Ch. and) from Earl Flinted (Buckley)

Now how are we to characterize these things. I'll be engaged if I know. There is a difference in the thickness and comparative length of the pedicels of the staminate flower & the joints of the rachis & the color & especially the wool & size of flower. If these were constant they are hardly expressible. The presence of an awn-like plume atop of the pistil is simply moon-shine and it will be unsatisfactory to rely on characters derived from calm leaves &c. Thus so far as at present advised we are in a nice fix

The Panicums you have carefully revised: still I am rather disposed to pick out of P. dichot. some of the forms P. villosum, Ell. is one of these ("spikes 1-fl." Ell) and is also P. angustifolium Ell, (vide Herb. Torr.) as late form or state. What I alluded to under P. dichot. as var nitidum is another (P. purpurescens Ch.! and) P. laxiflorum, Lam (P. pubescens, Ell P. ciliatum Schweinitz) seems distinct so does P. nervosum, Muhl. Nos 11 to 17, & No 21 inclusive, I think olney to one species. Nos 25.26.27 to another. No 18.19 20 to another

No. 5. 24. 23 to another. The others seem to be unlike Aristida I have not critically examined of late but have numbered them for future reference

Now I have given you material for many an employed moment in that cosy little room of yours & await with some impatience what you have to say.

Please, present my greetings to Dr Torrey & tell him I have no Cymanchium despairing to send him my supply except what is glued down being exhausted. But we are dished Preissbeck in W. Ind Orient. having given it a habitation & a name (g. v.)

You will think I send you nothing but grasses. Do you want anything else? Did you get my Photograph from Fontaine for yourself & Torrey? If so send me yours. Those I sent to me have not reached me and I must ascertain what has become of them.

I have concluded to put into the package some seed or Dr Gray. Will you have the kindness to send them to him safely, and by the same steamer "Linda" I will write him. We have no reconnecting Mail to this place but letters by mailed in New York find their way here somehow sooner or later

In the hope of hearing from you soon I remain

Very truly yours

A. W. Chapman

Conspectus of the species and forms of Andropogon

* Spikes solitary or single

A. scoparius, Mx.

var. maritimus, Chapm. incl.

A. tenuis, Nutt. Chapm! Fl.

A. diplostachyus, Chapm! Fl.

A. Gerardi, Chapm.

* * Spikes digitate or conjugate

+ Triandrous

A. furcatus, Muhl.

A. argenteus, Ell.

+ + Monoecious

A. virginicus, L. = A. dissitiflorus, Mich.? Ell. A. vaginatus, Ell. in part

var. tetrastachyus, Chapm. = A. tetrastachyus, Ell. Curtis in Herb.

"A. virginicus?" Gray in Herb.

A. dissitiflorus, Hale in Herb. Gray

A. macrourus verus Mich. Fl.

var. corymbosus vel pedicellatus

" viridis = A. dissitiflorus, Mich.? Ell.?

" glaucopsis, Ell.

A. Monophyllus Chap. = A. gracilis, Carp.! in Herb Chap.

var. dubius = A. argenteus, Curtis! in Herb Chap.

A. vaginatus, Ell.! in part, Curtis. Reisler. Ravenel & Engelm in Herb Gray. A. clandestinus, Hale in Herb Gray

A. Xanthostachyus Chap. = A. tetrastachyus, Chap.! Flora

A. longipes, Chap. = A. tetrastachyus var distachyus, Chap. Fl.

A. brachystachyus, Chap. (Buckley East Florida in Herb. Gray)

Apalachicola July 10. 1866

My dear Doctor

Ever so long ago I sent on a pressing invitation to you and Mrs. Gray to show us the light of your countenances in this benighted land. That was the beginning and end of all matters concerning you until just now I recognize your existence from a superscription on a document from the Boston Bod. What is the matter?

I have just had a pleasant visit from Dr. Tracy, your old Savannah correspondent. – a very clever and entertaining rebel. He remarks that the seeds of Elytraria virgata are albuminous & I see they do contain plenty of it, with a small orbicular embryo.

We expect to secure his services as teacher here next December which will afford me much gratification.

As for myself I am poorly, am dyspepsical — worked like a galley-slave ever since my return last December.

I have applied to the Secretary of the Treasury (I am Collector of this Port) for leave of absence, obtaining which I start north. My first halt will be in Philadelphia and afterward may visit Dr Warren in Boston, But I expect most assistance from change of climate.

Did you get the seeds of Bignonia capreolata, I sent you on my return home? Dr Gray gave me a quantity if you want them.

We reb are gradually settling down grumblingly into a passive obedience to authority, but we give the Yankee the cold side and covert sneer whenever we think it will tell. We snatch away any superfluous portion of our duff which may possibly come in contact with him in our walks, and we do not admit him to our parties and excursions.

We deem this course chivalrous and that generations unborn will call us blessed. We think the Washington authorities are sorely exercised about us & that soon they will fall down on their knees and beg us dont.

Yours ever,
A. W. Chapman

Southampton, Sept. 12/66

My dear Doctor:

Your of the 9th inst and accompanying Circular are duly received. I wrote day before yesterday to Mr Peay about his roots requesting him to send the specimens to me if he thought he could get them here in time or to you or if he had to send to Savannah to delay until my return. Please write him what you think best addressing "William T. Peay, Esqr, Bainbridge, Decatur Co. Georgia."

I went into Northampton yesterday and ordered 8000 labels struck off in form as you directed, Antique Type like the Flora. I am so-so. expect to leave New England by the 1st prox.

I have to look up a Deputy Collector at an annual Salary of 1095 $ or

as I suppose I would like to give it to a botanist if they were ever good for any thing in such matters. Do you know of any one, writing a good enrolling hand with a knowledge of book-keeping?

This writing makes me rather shaky and please excuse further word

Yours ever,
O W Chapman

P.S. Yes I received the diploma of Amer. Acad Sci and duly acknowledged it

Southampton Sept. 18/66

My dear Dodie

I have this minute read your of the 15th and reply.

It is in my power to make the position of Deputy a perfect sinecure. His office for which he recieves pay is Inspector which will, in our port, probably require fifteen or twenty days of the year. The rest he has to himself unless I choose to require him to perform the office work and to act as Deputy during my absence. During the winter or business season and because of my inability I must put this duty upon him and perform his duty (out door work) myself though the summer there is little for us to do.

Do you know Mr Denslow well? as to integrity I mean. As all the funds

P.S. I found a Corallorhiza (not C. multiflora) on the mountains yesterday which appears to be what I call C. mixantha only taller and fewer flowered. My copy of the "Manual" is in Northampton and I know not what you have to say about C. innata. Better look sharp at this genus as well as Spiranthes. I dont believe I ever did know these plants well

of every description are to pass through his hands & it is a point of the greatest moment to me and my bond. I will if you think advisable see Mr Denslow during my brief visit in N.Y. and if there is any other one you could recommend please say. When Botanists do hold the ropes why shouldn't they pull them ~~for~~ in the interest of the clan

I am much better — dont blow but little. Expect to leave about the first for Philad^a thence home Pack fast.

Ever yours
A W Chapman

P.S. Perhaps I had best not communicate with Mr D. until after I have seen the referees you mention.

Apalachicola, Feby: 29. 1868.

My dear Sir.

Yours of the 17th inst: is received. Glad to hear from you.

As to the Book, I think it would be better to send it by Express, as, in the Bags, the corners would be so much battered as to spoil the appearance of it, at least. Put a stout wrapper around it and direct "Via Columbus, Georgia."

I enclose $20, the expenses of the book to be deducted, and the balance to be devoted towards the purchase of whatever tokens you may decide to transmit to Mrs Booth. I wish it was more, but it must be taken as my mite.

My health is only tolerable, but better than when I last saw you, and just such as to suffice for a good excuse for doing nothing.

Yours, very truly,
A. W. Chapman.

Apalachicola Jany 2. 1870

My dear Doctor

Allow me to tender my congratulations to yourself and Mrs Gray on your safe arrival home after so long an absence. —

I will write Tracy and tell him what encouragement he may expect through the efforts of Col. Olney & yourself and nudge him in regard to the quality of his specimens — a suggestion that he might safely heed.

Leitneria is a Willow with a nut — in inflorescence & habit a willow & in carpological character a Myrtle. It is half way between the two Orders, &, since simplification is in order, it should be appended to one or the other as a Sub order or Tribe. I think you sent me

Dr Oliver's picture before you went abroad & I have only to say of it that Sprague could have done better with his eyes bandaged.

As for myself I am greatly disgusted with the reigning dynasty which has swept away indiscriminately both saints & sinners. Consequently I am compelled to break up and seek employment elsewhere. About the middle of this month I go to Jacksonville on trial leaving my family here, If not satisfied I purpose removing to Memphis, Tenn.

I know of nothing balanced to remain as ever

Yours most cordially

A W Chapman

Your Friend & Servant
Elias

Apalachicola Feby 9th 1870

My dear Doctor

Don't Keep mad nor "diabolical" for I was not aware you had "corns" and didn't particularly notice where my boot went. I was going to send Legget a squib about the (pseudo) Galatella I gave you (for I feel that some compensation is due him for sending me the Bulletin year after year) but will hold off and try something else. I will send by this mail (Monday next) the plants you want. I sent you the Centunculus before, and you said "yes" – so I thus put it in. You must look in my Herb. for Hydranthelium & Withania The latter Riddell used to send as "Physalis Carpenteri" and you may have it under that name. There is in DC at the end of Convolv. (my books are up at the house) a Cuban species very near my Garberi, but apparently different Garber has just sent me Echites Sagraei, or something quite like from Miami. E. biflora is

very showy like a Morning Glory white and fragrant and ought to be in gardens but would be unmanageable. I planted seed but they wouldn't come up. These are plumose (not comose) The crown of Gonol. flavid. is different from G. hirsutus & whether the color of the flower is really diverse in the same sp. is questionable. I have nearly all of our southern ones in cultivation and will see next summer.

Lobelia Floridana you will find in my Herb probably as "L. paludosa, major" also in Pon. Herb. sent more than 40 years ago (chew!) but I will send by this mail also

I have but little doubt that Thrinax Gaberi is the same as Nutt's Sabal min. but "let it be", and don't take away Gaber's rights by substituting minima. Nutt's blunder shouldn't be thus honored

No! I'm darned if I "work up Panicum" but after looking at the puzzling things for nearly half a century and desirous to relieve the shoulders of panting "dichotomum" if only temporarily, & not having the fear of Englemann before my eyes (who won't touch 'em) I venture to tell what I know, and what I think ought to be done with our southern forms (the northern are your look out)

Doctor! I am disposed to multiply species here, or forms if you prefer, for I find them preserving uniformity from Florida to Mass. and most of Elliott's species ought to stick (not his names) Of course I must be guided by what I see for I have no library & life is too short to write to Thurber in the hope of getting a reply. I am sorry that many of Elliott's species do not now exist in his Herb. P.P. ovale, lanuginosum & some others are not there, and I cannot make them out. — Back from dinner. The Convolv. I referred to is C. sidaefolius DC p. 414. I find my spn of Gaber's plant hardly sufficient but I send parts of what there is.

Our town is reviving and full of strangers I have returned to pills and only dip into botany when doing nothing else.

We all join kind regards to Mrs G.

Truly Yours

A W Chapman (Wm)

[illegible]

[illegible]

[illegible] ~~[illegible]~~ [illegible]

[illegible]

[illegible]

[illegible] before or after [illegible]

the operation, [illegible]

[illegible] which is [illegible] miles [illegible]

[illegible]

[illegible]

[illegible]

[illegible] Pekin.

[illegible]

[illegible] operation, & he used [illegible]

[illegible]

[illegible], it seemed to me [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] her name

was [illegible] — [illegible]

[illegible]

[illegible]

[illegible]

[illegible] Rogers repre-
[illegible] Prussian [illegible]
[illegible] Dance [illegible]
[illegible] Marie. Saint Germain
[illegible] "Pay" [illegible]
[illegible] you not [illegible]
[illegible] Saturday. — I [illegible]
[illegible] to be [illegible]
[illegible] Venetian [illegible]
[illegible] a pre [illegible]

[illegible] Rogers [illegible]
[illegible] Wednesday [illegible]
[illegible] Ulrica [illegible]

[illegible] Nov. 24. 75

Dear Doctor

[illegible] weeks ago I [illegible] upon the care [illegible] my back premises, and since then many improvements [illegible] have been laid up with the [illegible] [illegible] now carefully [illegible] up [illegible] more [illegible] for your [illegible] my age [illegible] [illegible], [illegible] regard [illegible] "[illegible], [illegible] ([illegible] [illegible] company) [illegible] Mr [illegible] [illegible] insects [illegible] your [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible], [illegible]. [illegible] most quite [illegible] enough, [illegible] the remainder are, [illegible] [illegible], [illegible] [illegible] [illegible] they [illegible] [illegible]. Mr [illegible] [illegible] me that he [illegible]

[illegible] excellent condition, [illegible]
[illegible] pressed, and wants
[illegible], which I can't get alive, I'll
send them [illegible] if I did not get all
of the Scene at Chattanooga, in that is
the only heading known to me, and in it
one [illegible] wants.

This has led me to make a package containing
a few more specimens of grasses detected
during my trip to the Keys in Feb. in
the return of the terminus, and which
as I know have not previously been recorded
as belonging to our flora, I did not have
[illegible] to do much botanizing, & having
little time to dry papers, the collection I
did make are miserably preserved. I
[illegible] much to interest me, although I am
satisfied that the time of the year I selected
was the most uninteresting of all for view
of the trees & shrubs were in full power & vigor.
I mean, somehow, to make a protracted visit
to that region, and then give a more [illegible]

In glancing at all, I may do in
[illegible] paper, an appropriate [illegible]
of October, and perhaps in this I am
inclined to go on my own [illegible].

I [illegible] pressed with the [illegible]
in [illegible] the travelers, and miss them
very much. On the [illegible] think they
all things to interest, inquiry
of course, mainly upon their own [illegible].
I [illegible] pleased to welcome them again.

This is my [illegible] except that I remain, ever
Very cordially Yours
S. B. Chapman.

P.S. Some [illegible] of letters [illegible]
[illegible] are [illegible] remembrance in hand
[illegible] send some notes on the [illegible]
[illegible]

[illegible]

[illegible] in a [illegible] of [illegible]
[illegible] but it was [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [

[illegible]

Aug. [illegible]

[illegible]

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] brought [illegible] [illegible]

[illegible] [illegible] the [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] in [illegible] [illegible]

[illegible] the best [illegible] of a [illegible] [illegible]

a [illegible] pount, [illegible] in a [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] ([illegible] [illegible])

[illegible] [illegible] [illegible] a [illegible] [illegible] [illegible]

X [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] better [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] sends you [illegible] [illegible]

[illegible] [illegible] of [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] but [illegible] in early [illegible]

[illegible] a [illegible] [illegible] [illegible] [illegible]

If the [illegible]
[illegible] in
[illegible] leaves
[illegible] any [illegible]
[illegible] one of the [illegible] specimens [illegible]
is [illegible]

I [illegible] you [illegible]
to [illegible] your [illegible]
duty as a [illegible]
[illegible]
case. If possible I will [illegible]
[illegible] you [illegible] in [illegible]
[illegible] a [illegible] as [illegible] ~~[illegible]~~
[illegible]

With kind greetings [illegible], I
remain Cordially yours
[illegible] Chapman

Apalachicola Mar. 1st. 1877

Dear Doctor

Perhaps it would have been better to have omitted the wet moss in the Can. I am sorry the Iris reached you in so poor a state. Last week I dropt you a postal stating that they are now just flowering. I think you will find good specimens in the Tor. Neck of our three species in flower. They now have nearly full grown pods (4 1)

In the interest of Mr Buckwalter I visited two weeks ago my old haunts at Chattahoochee & Quincy, getting what he wanted & many other things botanically interesting — fell in with your grandsam conductor, who kindly took me aboard & dropt me wherever I wanted. I had not visited the region for more than thirty years and wonderful changes have taken place during those years. Those fields were not there

(at Crallo) then, and in the vicinity of Quincy
often pine woods have been transformed into
a noble growth of Oaks. Along the fence where
you got your Torreyas I found for the first
time Gonolobus Baldwinianus, and the flowers of
the haniculate umbels were white, pure white.
I read your paper on these, & kindred plants
with much interest and was glad to get it, and
finding that you do not quote my G. hirsutus
and remembering that only a fragment
of it exists in my Herb. I determined, when
at Quincy to go for it & the Baptisia megacarp.
which once grew with it (and no where else) at
Tologic creek, twelve miles on the road to Apalachicola
& Euchitas found both, and took up roots. The
Gonolobus was just beginning to flower, and it is
(Katie tells me for you know my infirmity) greenish
orange. It is not the G. hirsutus as you understand
it and aside from color the calyx is quite differt
& the pod is yet to be noticed

What a pretty thing Wal Silene is when in
full bloom! Asclepias viridula has no milky
juice. Echites biflora grows on the mud islets
of the Caloosa River with flowers like a Morning
glory Can I help you further?

Yours truly
A. W. Chapman

Apa 21st Jany 78

Dear Doctor.

Katie showed me your letter two Boats ago.— Yes I have some spare copies of Flora— ask Blakeman & he what was their retail price— I don't know, & tell me how to send. See Coulter's Gazette for Jany & Feby for an article of mine— New Southern plants accumulate Gates sends by to day's boat some queer things I dip again into Panicum & shall print notes In Manual you have "P. dichot. L!" what one is it— Is it that pubescent low (8'-10') one with a crowded panicle that Oakes used to get about Ipswich with purplish spikelets? If you have a spare one which you think the same as that of Linn. I want a specimen I would much prefer to discard it & Lamarck's P. nodiflorum— both meaningless

Glad to find you both back— say so to Mrs G. Boat came a day earlier caught me napping have no time for further words

A W Chapman

May 31st 1878

Dear Dr.

Been sick & nasty for some time & have been looking over your book — a master piece of research, and generally judicious (not always) It is capital & call it a Synopsis or what not the characters are long enough for accurate determination which is all that is required in such a work. The antique type makes the best Flora and I am glad to see you continue its use.

You dont well describe Vac Elliottii & I am sorry to find it put with V. tenuis. with which it has but little affinity — Yes Achras Sapota has reached Liq Vit Key but was planted there in an old garden — Gratiola sub. "from a liq. perenial root" no that is not it — root fibrous but the lower part of the stem woody from wh. the flower-branches spring — Scoparia is spreading along the R Roads in Ga & C from S. Fla. cattle

during the war — Geranium ten-nus filiformis cannot possibly be Walt's setosus — see his Flora. — Now that every body has had his say here we can come to some determination but not now — Utric pusp. Walt — "doubtful because the fls are said to be small" here they are always small indeed smallest of all. — To Ping. pumila you put P. australis — shocking! back right out of that — no two more unlike & distinct

L. Floridana — I feel sure must be different although it may require special pleading to make out the case. L. pal. grows all about back & is out of fl & for now (April & early May) so I cannot compare fresh fls with L Flor which will come into fl middle next month but I have minutely described the forms & hope to be able to get out in June 6 miles for the latter and make a full comparison

This is all I had marked but I shall have lots to say when I feel better

Baptisia calycosa! undoubtedly a good species & no state of Lecont: nor Torr. Its habit is that of the ~~latter~~ former but its affin of the latter.

I have seen Lecontii with those same bracts (indeed I think you were about making a B. Chap. out of one 40 years ago) but never with that calyx

Well your book is $5. & mine is $3.50 I owe you on acc $1.50 — make a note of it

I am feeble and can't write more Thank you for the book — hope you may live to see the end of it — although like the excellent Elliott you may have to consecrate the results of your labors to the dead — You seem to keep better than I do.

Very truly
A. Gray

I never could make any thing but L Veiny out of this but it always is like this here

I had another one marked Mic (Hedeoma Mutt) bracteolata. Along here Nutt was ahead of Ell. & the latter's Cercanthera was not published — Nutt's plant sure fl seems to be that. What say?

Apalachicola Aug. 22/79

Dear Dr Gray

I have your postal of the 12th inst & letter of the 18th and enclose herein your three wants.

E. dichot. is a cultivated branch with leaves twice as large as wild. The corymbs are not always "short-peduncled" as I said in Bot. Gazette but in the full-grown bushy plant they are mostly so. Dry weather this year killed mine.

E. tinctorium I saw in Decatur Co Ga 30 years ago when staging from Albany to Bainbridge. I have but the top of a single plant preserved in some book I had by me on my way to Savannah 3 or 4 years ago. It is nearest E. glaucescens but with different head & leaves. Nothing but its slender trailing habit I believe keeps E. scaveolens from E. aromat. a var of which you will probably make it. So no

matter about the oversight of the previously name plant.

You saw Gaiber's Leminobium I suppose Poor fellow I wish it was a good new Genus. He sent seed of Chapmania but I cant get them up, I believe there is something peculiar in their germination. He also sent a Commelina which I thought C. virg. but it not In cultivation it shows quite diffrent & is I suspect C. erifolium of somebody (my books are up at the house).

Katie & Mr C are in Rome Ga & I am solitary & alone and just now busy with a young mother

So Good bye

A. W. Chapman

You have of course heard of Gray's death two or three months ago.

Sept 12/79

Dear Doctor

I wish I could write you with less uncertainty about E. ~~glauciforus~~ cuneifolia since I dont find any thing in my bundles that I am quite sure of although I believe the enclosed bit to be that. It was got at Jacksonville. It grows up the river but not here. I think you will find something in my Hb in N York that I took to be that & in my view quite distinct from E. fortifolia However do as you like – its your fight as I used to see E. cuneifolia it was a tall 2-3 ft or more branching with broad cuneate leaves. E tort is low (12-18') simple except to form a compound corymb & growing in clusters. I wrote to Katie & told her & Mr C what you said (you & Mrs Gray) thank you both for my share & same to you

Yrs Truly

A W Chapman

Chapman

Apa Feby 5/80

Dear Doctor

Here is a request that I have had a long time in a quandary what to do with it. Of course I cant respond although I would like to. So I conclude to send it to you in the hope that some of the young botanists around your table well posted in matters desired by the Dr will take the matter in hand. I commend the letter to you at odd moments I am looking over your Flora & when a Scutellaria that I have in cultivation bloom I will send you a sample to see if it is not your S. brevifolia. It is my S. integrifolia - major which Gray was always scolding that I did not make a species of. Best regards to Mrs Gray & yours always

A W Chapman

Appalachicola Oct 18. 1881

Prof. S. Watson

Cambridge

My dear Sir:

I am not familiar enough with you to write as I propose to intrude. The matter is just this. A new edition of my Flora has long been needed and I have at last "worked up" and prepared all additional matter so far as I know in the form, for the present, of a supplement. Now there are in the Herb. of Harvard quite a few choice species belonging to my region that may come in, and the question is how can I have them. I am at a loss (at the top of velocity) and then, want to know if I can help it, like you hands so full that you cannot help me here. If I knew how many species you have in your Herb., not included in the list I send with this, I could tell, as I think, that comparatively labor is demanded to include them.

Chapman

While you pause look over this list & and note whatever omission may occur to you and send me a list of them and if I find it a formidable one I will pack up and go to you & attend to it myself but if the omissions are not numerous I thought, hap you good nature will come to my relief & help me out — this is to be seen. I know of three or four villains down in the Peninsula which I have no means of determining, & Cuba — two Gilmudians & an allied thing which with Mr Eaton's help I don't quite make out. These villains are all in out not named. And that Bolivia down there — isn't it Sucre's specimen? & what is ever and me with much smaller flown? But at this stage it is unnecessary to go into particulars until I hear from you.

I write to Eaton to call him to do up the dozen forms that have turned up, & I have sent a copy of this list to Cuesby & half a dozen another to Ingersoll, for I want to bring up the work complete to date so far as it is possible.

I believe the name of the firm in my previous letter has been changed. I have rather my young friend Norton in the College, to tell me the present one. I shall probably learn to-day. But enough now. Let me hear what you have to say.

Very truly Yours

A. H. Stephens

Southampton Aug. 10, 82

Dear Doctor.

The Solidago is mine, only large. In Compos., at least, I shall not fight against your decisions, & would, had I the MSS. here, make the needful change. But you & I were once required to repeat the axiom that "things that are equal to the same thing, are equal to one another", or to that effect. If this be a S. Missouriensis how can that be distinguished from our S. angulata?. I wish you would unite them and get rid of another puzzle. Wilson hangs fire. Have heard nothing from him yet. I shall start for home anyhow about the first prox. Please say to Watson (& when greetings) that when we erased Papayaceae from the MSS.

I believe it left Carica under Cucurbitaceae. The change was made in conformity with the views of Benth & Hook, I think. Ought it not to come under Passifloraceae? and the error rectified in the Ms.

No rain until yesterday and everything drying up and the mercury among the nineties. Who wouldn't come North for Summer comfort.

Truly Yours

A. W. Chapman

Apalachicola Jan 24/83

My dear Doctor Gray

I needed not your postal to remind me that some sort of a message ought to be on the way to you, but I wished to send you the Gonolobi you wanted at the same time and have been too lazy to hunt them up. - After leaving you I went back to Southampton and remained two or three weeks & then returned via Cincinnati & the Cinn. S. R.R. (magnificent scenery over the Cumberland Mts.) to Rome where I soon learned that the gale had played the - well, sad havoc with my property here & I came directly on early in October, only to go through the hardest spell of sickness I ever had. You remember at my first meal with you I rose and went out That was the commencement of my troubles & ended in complete rejection of food & perfect exhaustion. I do not & never shall know the cause or pathology of the attack. But I am all right now. Recently through Davenport I heard of your sad accident. Broken clavicles are never very good things and rather ticklish for old folks But your pot-hooks are natural so I suppose you are well through it - All's well that ends well, and now at you. - I send with this the two Gonolobi & some other Ga Mt-plants - Not to bother you I have in the list said my say & you can only say Yes or No.

In all your valuable "Contributions" you have never published any thing so valuable to American Botanists as your notes on Aster & Solidago. I have studied them like a Classic and find the hitherto dark gropings all disappear. Thank you everlastingly.

My sickness delayed the Supplement but it is by this time all done. I have given Wilson a list of names for whom I design copies to be sent but yours & Watson's are not among them, for I have made corrections of the first issue and I desire to give the corrected edition, which will be out as soon as I get estimates of cost to determine whether I or Ivison & Co foot the bill.

Still I am living in the old house alone taking meals at Bill's (Bill Fuller). I rent all but two rooms to a couple of Englishmen who are staying here, as sleeping rooms which pays my board & I am at no expense. I expect to join Katie in Rome next May or June, and that will be my home greater for the remainder of my life excepting two or three winter months here. This place has come up rapidly & with a population as large as at any previous period, but I know none of them and care less - My friends are all gone on before!

Bill and Adeline desire to be kindly remembered to you and Mrs. Gray and hope you will some day visit them again - which sentiments are heartily entertained by Yours Very truly

A. W. Chapman

Ithaca Jany 1. 64

Dear Doctor Gray

Well yes no objections to that but we can do better. You have honored me from time to time with a heap of things and I have never had my wits about me to return the compliment when I had a chance I have a legitimate one here and let us name the clean little thing S. Grayii (or one i if better), Chapm. ined. That looks better, and it so has happened there are few of them in the books.

I was not aware of your being in press is it in continuation of the Synop. F. N. A.? I hope so and at all events get as much of the Compos in print as you can for

you alone know anything about them anyhow I am free to confess that I do not and we are not to "live always" That overhauling of Solidago & Aster was a grand thing.

I have been arranging my collections of last summer lately, and find a Rudbeck which I thought was R. laciniata, but J. D. Smith has just sent me under that name something he got at Columbus which looks different and I believe he gets your or Watson to look over his collections. Mine, if it had 3-lobed leaves would be very like R. subtomentosa. Can't you separate R. triloba var pim from the bottom type? I believe it is a species.

Awful cold winter here and oranges & peach farms gone up.

Yours truly
A. W. Chapman

P.S. Katie is not with me this winter but with her sister in Rome who is quite poorly.

Yale [illegible], June 1.

Dear Doctor Gray,

My own [illegible] received [illegible] are still at work, and will do so [illegible] continue in harness as long as breath remains to wear it.

In the autumn I was mainly interested in the Malvaceae, and I don't know that I discovered any of your suggestions — merely, but I don't like [illegible] same things into [illegible] Lasiocarpus. You write as about Abutilon & Wendlandia. The flowers are pink — never sulphur, and then where does the one called incanus in [illegible] (where the flowers are sulphur) go? Perhaps you write it with H. Moshencia.

What I considered H. Curtisii is just H. mutabilis as you suggest, except that the corolla is bell-shaped — little longer than the calyx.

Malvastrum grisebachianum favored us a visit of a year or two, then disappeared.

I note varieties, but will [illegible] [illegible] to be in fashion. If that tall large-pod form is S. acuta, Brum., why back in to an [illegible] which apparently has nothing to do with it? Linden "fol. lin lance" — no. "Caps. 5-beak" — not at all. "Fl. pallide luteis" — not a bit of it — the deepest & richest yellow of any I know of. I suppose I have read the description in the Prod. a hundred times, but never dreamed that I had the plant in my garden. I wonder if any other [illegible] [illegible].

So many air castles are elaborated in the closet & sometimes think that ignorance of the habits of plants not unfrequently interferes with a just discrimination of species.

Well, after taking leave of you at that flying visit, I started for home, but was laid up in Rome for two weeks, & finally, & tumultuously got back here to my big arm-chair where I have remained, half dead, ever since, & now am impatiently waiting for weather warm enough to thaw out. We are having frost nearly every morning, when we might to have natural Spring breezes.

Did you ever find out the possibility of getting that part of the Prod. that contains Boissier's Euphorbias & the last vol. Griesbach's W. Indies of which you were doubtful?

I shiver through, I endured a sitting at the Photographer's in Boston with the result enclosed.

Yours most cordially,

A. W. Chapman.

Apalachicola April 15. 18 –

My dear Watson. – Your letter is a surprise in two ways – as coming from you & as announcing the departure of Dr & Mrs Gray for Europe. I had no idea of any such intention on their part. But I am really glad Gray has thrown down the books and sun, for if he is not quite worn out by his long and perplexing labors, he ought to be. He has done enough & he ought to empty into your lap whatever yet remains to be accomplished and enjoy the remnant of life remaining to him in that repose that nature requires.

It was a disappointment to me not to have met you during an hour's call at the garden last autumn. My trip was a sad one all round & the week I passed in Boston trying to regulate matters of business ought to have been passed in bed. I still remain shaky, but at last the Greenland ice-

Chapman

alone

has passed and under the influence of some christian weather I am in hopes of picking up a bit.

Your offer to assist me in getting Griseb. Flora, & the parts of the Prodromus, is kindly, & if you can tell me the amount required I will forward it at once.

To complete my sett of the Prod. I want Fascic. 1 of the 2d part of Vol. 15. (It contains the genus Euphorbia by my old correspondent, E. Boissier). The other parts of Vol 15 I have. & of Vol. 16 all except "Sectio Posterior Fascic. 1. Sistens Cupulifl. &c." This I have.

I am glad to have your Phot. in my Album. You are in good company, facing one of the worthiest of mankind, Louis Von Schwendy.

In the family, where I stayed in Roxbury, was a bevy of women all demanding my picture, and the day before leaving they got me into a gamet in Beacon St children ~~and to~~ the tune with the result before. It is a sad picture, & probably the last, I am sorry I have none of cabinet size to send you.

Have you at fingers end the name of that Compos. enclosed in my letter is the D[illegible]?

I want to keep up the impression existing among my lady friends of omniscience in botany, but here they have me in a corner.

Very cordially Yours,

A. W. Chapman

P.S. I have a Spiranthes recently sent from East Florida which is new to me. It is a winter-bloomer, growing in decaying leaves, - not in the ground - with the aspect of S. gracilis but with fewer larger purplish flowers. Are S. brevilabris, vernalis, Lindl. & S. cinnabarina, Benth. (which I know nothing) as credited to this region? If yes, or another shearimen I will send it to you.

Chapman

Apalachicola Nov 3. 1887

Dear Dr Gray

Just home from the mountains with a formidable pile of unanswered matter on my table among which are a note and three postals from you. First let me congratulate on your safe and healthy return to this side. And you have filleted in before you fully recovered breath. You have done enough. Let the younger fry do the rest & retire on your honors for the short future

Never mind the books. I can do without them. Glad to see you keep Hibiscus incanus & dont use up the old name. I enclose fragments of Picramnia which agrees so minutely with the description of P. pentandra (fruit not seen) and so generally with Mr Fadyen's detailed character of P. Antillana that I shall be surprised

If it prove to be something else I have only a sample of each sex & some bits of each.

I enclose also a bit of Jussiaea from way down south - tops of what is represented as a tale annual Tell me if it is J. erecta

Time for no more words am remain

Very truly yours,

A. W. Chapman

Apalachicola, Dec. 26. 1887.

Dear Mr. Watson.

The enclosed statement explains itself. I cannot understand why Mr. Weigel should send me this mutilated portion of Müller's monograph. Please advise me what to do with it.

I have lately received from Southern Florida an Olea or Osmanthus which seems to be quite different from our Olea Amer. The fruit in shape is like the European Olive, but larger, and yellowish green. I have written for more material & information, and will divide with you.

My last information of the condition of Dr Gray was up to the 16th, and I have strong hopes that he will rally wholly, or in part.

Yours very truly,

A. W. Chapman.

Apa Nov. 18. 1889

Glad to learn that you still remain at your post, and thanks for your kind wishes. I was eighty on the 28th of Sept ultimo, an age when Chapmans attain their majority, and walked sixteen miles that day. The initials stand for "Alvan Wentworth".

Chapman

UNITED STATES

POSTAL CARD.

ONE CENT

NOTHING BUT THE ADDRESS TO BE ON THIS SIDE.

Prof. Sereno Watson
Cambridge
Mass.

Apalachicola Feby 27. 1890

My dear Watson – A dozen thanks for your fine present which came duly to hand and which I have been looking over as leisure permitted before acknowledging its receipt. – It is nicely got up – I am glad to see that you generally retain the old familiar names – Am not quite so glad as to the sequence of the Orders but I believe not your fault. Who did up the grasses? I kick out of doors Pan. dichot & P. nodiflorum with characters applicable to the group. and consider them autumnal states of P. laxiflorum. I have a copy of the 1st 2d & 5th editions of the Manual and

this of course will be the last for me but I hope you will live and benefit the science with many future publications.

Where is Mrs Gray? Do you retain your position at the Garden?

What a wonderful winter. How vegetation has remained unchecked by cold and butterflies are flitting as in midsummer. — Renewing my thanks I remain faithfully Yours,

A. W. Chapman,

Do you know certainly of any locality for Schrankia uncinata east of the Mississippi, within my limits? Do you know of any veinless species with such long and slender legumes as Torrey ascribes to his S. angustata? I do not of either, But I have a new one from S. Fla with just such legumes, but with the veiny pinnules of S. uncinata. So we have four — two veiny, and two veinless, counting S. brachycarpa a good species, as it is. My new one would be S. leptocarpa DC. if that had veiny leaves. Have you that in the Herbarium? Always yours

July 17/90

A. W. Chase

UNITED STATES

POSTAL CARD.

ONE CENT

NOTHING BUT THE ADDRESS TO BE ON THIS SIDE.

Prof. Sereno Watson

Cambridge

Mass.

Apalachicola July 31/90

Watson, dear." The combat thickens," and I am prepared to "rush to glory or the grave" by inserting four, & possibly, five species of Schrankia.

Veined leaflets

S. S. uncinata & Floridana

Veins obscure

S. S. angustata & horridula (brachycarpa).

I am not yet satisfied that S. uncinata is here. Mohr, Chapman & Gattinger alone insert it, but he (Mohr) writes me that it was a mistake. I am waiting to hear from Gattinger's H. Tennplant, for this may be correct. Has Canby's 5-6 pair of pinnae or 2-3 pairs. That will determine whether his is S. uncinata or Floridana. Britton writes "there are specimens (in Colyb & Cole Herb) marked S. uncinata --- from St. Augustine (Canby) & S. Carolina (Read) from your herbarium ... the pods are sparsely spiney, the leaflets are veined". There is some mistake, for I never had a correspondent by that

name, and none from S. Carolina exceptg Ravenel & Curtis.
Durand, just previous to his death, sent me a package of choice bits from various regions, & possibly, one of them may be the one in my herbarium, and might have come from the west. Very little of Trans Mississippi botany was known, I believe, in Willdenow's time, and his plant would not be likely to come from there, but I can't help thinking that his range was a inexpressive, unless he included our other species. If Gattinger's plant proves not to be S. uncinata, then I must continue the species on Willdenow's authority alone.

I did not commence this letter to tell you this, but to enclose the legume of a species that I found among the Mts of N. Western Ga. It was out of flower and only a pertain containing three beans & two fruitful peduncles were preserved. I supposed it was a form of S. angust- brack, but on closer inspection I think it nearer Gray's Platycarpa.

The primae of the three leaves are six, and it is a much slender plant than our brachycarpa, the valves of the legume are much wider, while the replum is much narrower, & both less prickly. Please compare it with Gray's. For comparison I also enclose legumes of brachycarpa.

Thanks for your congratulations. I don't intend to trouble you again, but remain Truly, Faithfully,

A. W. Chapman

Dear Doctor.

Really I dont intend to impose the task of writing my work out in detail, but in my letter of yesterday I neglected to enclose the within, which I afterwards found on my table. — In looking over my Willows, and comparing my S. Hindsiana with Andersson's S. longipes, I suspect we mean the same thing. But ask Eaton to look at my MS and see whose blunder makes me say "Leaves thin, 2'-3' long, 1' in diameter, enveloped" &c. — It should be "Leaves thin 2'-3' long; fruiting ament 2'-3' long, 1' in diameter, enveloped &c.

Having wrote you yesterday, I have nothing more to add now

Respectfully

A. W. Chapman

Roxbury Maple St Sunday evening

Dear Dr Gray

I have been here a week but unfortunately not quite well On monday last I went over to see Mr Wilson with the intention calling at the garden but feeling unequal to the walk came directly back

I was getting on satisfactorily until yesterday when my kind friends here insisted upon taking me to a Photographer in whose cold rooms I encountered another child with fever. Thus much explanation. Now if I feel as if I could venture it is my purpose to leave for home on Wednesday & failing in that I hope to see you on some day soon after

Truly yours

A W Chapman

Nogales, Ariz., June 4, 1891.

To
Prof Sereno Watson -
Dear Sir -

I am imposing on your good nature yet again in sending what is known here about as jasamine. The resemblance is strong enough to warrant any one's speaking so. I have by me only Coulter's Rocky Mt. Botany and I can't seem to place the specimen. I send last year's seed pod and seed. There are several seed; the flowers are always in pairs and the stamens seem to be five not two as in the garden jasamine.

The Dasystemon wheleri are run up their high brown stalks all over the hills. I wish you could have some out of our abundance.

May I trouble you for the name of the specimen? With thanks -

J. W. Chapman.

LETTRES
AUTOGRAPHES
ET
MANUSCRITS
MAISON J. CHARAVAY AINÉ
DIRIGÉE PAR
ÉTIENNE CHARAVAY
Archiviste Paléographe
3, RUE DE FURSTENBERG, 3
ci-devant, 51, rue de Seine
PARIS

EXPERTISES
CERTIFICATS D'AUTHENTICITÉ
VENTES AUX ENCHÈRES
ET A L'AMIABLE
ACHATS AU COMPTANT

PUBLICATION DE
L'AMATEUR D'AUTOGRAPHES
seul journal mensuel sur cette matière
ET DU
SUPPLÉMENT A
L'ISOGRAPHIE
DES
HOMMES CÉLÈBRES

BULLETIN D'AUTOGRAPHES
A
PRIX MARQUÉS

Paris, le 11 Juillet 1895.

Madame,

J'ai reçu votre lettre où vous m'annoncez que vous conservez pour vous et pour M. Alexander Agassiz la totalité des pièces que je vous ai adressées le mois dernier. J'ai donc inscrit la somme de 191 fcs au débit de votre compte.

Je vous enverrai à l'avenir mes catalogues mensuels, je souhaite que vous y trouviez quelquefois des pièces à votre convenance. Je ferais le même envoi à M. Agassiz si vous aviez la bonté de vouloir bien me donner son adresse.

Je ferai volontiers des échanges avec vous. Veuillez m'envoyer la liste de vos doubles ainsi que celle de vos desiderata.

Veuillez agréer, Madame, mes plus respectueuses salutations

E. Charavay

S. Rouvet

LETTRES
AUTOGRAPHES
ET
MANUSCRITS
MAISON J. CHARAVAY AINÉ
DIRIGÉE PAR
ÉTIENNE CHARAVAY
Archiviste Paléographe
3, RUE DE FURSTENBERG, 3
ci-devant, 51, rue de Seine
PARIS

EXPERTISES
CERTIFICATS D'AUTHENTICITÉ
VENTES AUX ENCHÈRES
ET A L'AMIABLE
ACHATS AU COMPTANT

PUBLICATION DE
L'AMATEUR D'AUTOGRAPHES
seul journal mensuel sur cette matière
ET DU
SUPPLÉMENT A
L'ISOGRAPHIE
DES
HOMMES CÉLÈBRES

BULLETIN D'AUTOGRAPHES
A
PRIX MARQUÉS

Paris, le 7 Mai 1896

Madame,

J'ai l'honneur de vous adresser sous ce pli une lettre autographe signée de Pallas, qui figure sur votre liste de desiderata. Si vous désirez en faire l'acquisition le prix est de 15 francs; dans le cas contraire je vous serais obligé de vouloir bien me la retourner.

Je vous prie d'agréer, Madame, mes plus respectueuses salutations.

Charavay

LETTRES
AUTOGRAPHES
ET
MANUSCRITS
MAISON J. CHARAVAY AINÉ
DIRIGÉE PAR
ÉTIENNE CHARAVAY
Archiviste Paléographe
3, RUE DE FURSTENBERG, 3
ci-devant, 51, rue de Seine
PARIS

EXPERTISES
CERTIFICATS D'AUTHENTICITÉ
VENTES AUX ENCHÈRES
ET A L'AMIABLE
ACHATS AU COMPTANT

PUBLICATION DE
L'AMATEUR D'AUTOGRAPHES
seul journal mensuel sur cette matière
ET DU
SUPPLÉMENT A
L'ISOGRAPHIE
DES
HOMMES CÉLÈBRES

BULLETIN D'AUTOGRAPHES
A
PRIX MARQUÉS

Paris, le 29 Mai 1896.

Madame,

J'ai l'honneur de vous adresser sous ce pli la pièce signée de Dodart, de mon dernier catalogue.

Veuillez agréer, Madame, mes plus respectueuses salutations

Charavay

Paris, 19 août 96.

Madame,

J'ai reçu votre
mandement de 20 francs,
pour les deux pièces :
Dodart et Pallas.

Votre tout dévoué

Charavay

BOSTON, MASS. AUG 30 1-PM 1896

BOSTON MASS. AUG 31 7 AM 96 GEO. STA. B.

CARTE POSTALE

Ce côté est exclusivement réservé à l'adresse.

PARIS 15 R. DES SAINTS PÈRES 5 AOUT 96

PARIS 15 R. DES SAINTS PÈRES 20 AOUT 96

RÉPUBLIQUE FRANÇAISE 10 RÉPUBLIQUE FRANÇAISE

Mrs Asa Gray
Botanic Garden

Cambridge, Mass.
(Etats-Unis)

616

Paris 12 janvier 1856

Monsieur. M.M. Lasègue et Velpeau s'occupent de vous écrire une longue lettre qui partira sous quelque jour, et à laquelle j'ajouterai peut-être quelque signes. Mais je ne veux pas attendre le départ de cette lettre pour vous remercier de l'envoi que vous vous êtes empressé de nous faire du rare Schwinitzia, plante qui comble mes espérances et à laquelle vous m'offrez d'ajouter le Sarcoder. J'accepte avec reconnaissance votre offre pleine d'obligeance. Grâce à vous, mes

anatomiques des Monotropées vont être enrichies du Schweinitzia que je n'osais plus espérer, et du Sarcodes, ce genre curieux que nous connaissons à peine de nous en Europe.

Le nom adressant, à M. Delessert ou à moi, le Sarcodes, que j'attends avec une grande impatience, dites nous, je vous prie, dans quel recueil il a été publié; car, non seulement la plante manque au herbier de Paris, mais j'ai inutilement cherché, avec le concours de mm. A. Brongniart, Decaisne, Lasègue, etc, plus érudits que moi, sa description et sa figure.

Dans le cas où vous ne pourriez pas nous envoyer plus d'une échantillon de Sarcodes, celui-ci appartiendra à M. herbier Delessert, et je ferai mes efforts pour que mes études d'anatomie ne le défigurent pas trop X.

Je vous prie de vouloir bien agréer, cher et très obligeant Professeur, l'assurance de ma reconnaissance et de ma haute considération

Dr Aug Chatin

208, rue du faubg St Honoré

X Le parasitisme du Sarcodes a-t-il été bien constaté? Et en ce cas, sur quelles plantes vivait-il?

Chatin

INSTRUCTION PUBLIQUE.

Académie de la Seine

École Supérieure de Pharmacie.

Paris, le 24 9br 1866

Monsieur,

Connaissant votre grande obligeance pour les botanistes, je viens vous prier de mettre à ma disposition, pour que je puisse lui étendre mes recherches anatomiques sur la famille des Monotropées, le Schweinitzia ou Monotropsis, plante américaine que vous avez figurée dans vos beaux ouvrages. Le Schweinitzia manque tout à fait aux herbiers de France, de Genève, de l'Angleterre et peut être du continent européen. MM. Delessert et Lasègue me chargent de vous rappeler à votre souvenir et de

vous exprimer leur vif désir de recevoir un exemplaire de cette plante rare. Pour moi, il me suffirait d'avoir un fragment long de 4-5 lignes de la extrême base rhizomateuse de la plante, un petit fragment pris plus haut sur la tige et une des feuilles squamiformes. Si vous pouviez me rendre le plus grand service de me donner ces choses, vous me permettriez par là de compléter mes études sur les Monotropées, de quoi je vous serais éternellement reconnaissant.

Si, à mon tour, je pouvais vous être de quelque utilité, je m'en estimerais très heureux. Je vous prie, en conséquence, de disposer en toute occasion de moi comme d'un homme vous étant tout dévoué.

Agréez, Monsieur, l'expression de mes haute considérations pour votre personne et vos importants travaux

Ch. Chatin

Prof. de Botanique à l'Ec. de Pharm. de Paris

208, rue du Faubourg St Honoré

Paris

New Haven Conn
March 18th 1890

Jerome Watson, Esq

Dear Sir

Enclosed find a certified check for $18.00 for which I wish you would ~~[illegible]~~ send me "Sullivants Icones Muscorum" & "Supplement (do) — both of which are advertised as for sale by you, in Torrey Bulletin. Mch 1890 —

Send to E. W. Chatterton
c/o Mechanics Bank
New Haven
Conn

Museum, Auckland,
New Zealand, March 3, 1879.

Dear Sir -

I trust that you will excuse the liberty which - as a total stranger - I take in addressing you. For some years I have been engaged in investigating the botany of New Zealand, and have made large collections from all parts of the Islands. I am now making use of a portion of my duplicate specimens for exchange with other countries, with the view of establishing the nucleus of a general herbarium in Auckland, and it has occurred to me that possibly you might not be indisposed to exchange a series of North American plants for New Zealand species, or, if you were not able yourself to do this, might know of some American botanist who would be glad to make the exchange. I could send any number of Phanogams and Ferns that might be agreed upon, up to 600 or 700 species, or perhaps more. I would also guarantee that the specimens should be good and characteristic, and accurately named. If you think that you can do anything in the matter, if you would kindly write me a line to that effect, I will at once send a first consignment via San Francisco, and on its receipt you can return me what you consider a fair equivalent in American plants. My agent in San Francisco is Mr Hugh Craig, 307 California St. He would forward my parcel to you, and would also receive any package intended for me.

Trusting to hear from you in reply, I remain,

Yours faithfully
T. F. Cheeseman.

Prof. Asa Gray

Uhickering

Bangor July 18. 1859

Dear Sir

Since writing you last, I have been quite busily employed, in one way and another, and I now seize this moment of leisure, to thank you for your kindness in sending me a copy of the Catalogue, and to express my great ~~gratifie~~ satisfaction with its appearance.

It will I think be an almost invaluable aid in making any exchanges.

What is to be the price? I have, as yet, seen no advertisement of it.

My trip to Katahdin, the middle of last month, was a

the cause to bring it to perfection.

It will be somewhat interesting to notice whether it continues to flourish in cleared land.

I hope those specimens I sent you, arrived safely and are in process of growth.

I wish now to take a liberty which you may deem an unwarrantable one, and if so, will of course act your own pleasure with regard to it. but just at present I think of no one upon whom I have any special claim.

My request is this, that you would have the kindness to present my name, as a candidate for membership of the "Am. Association for the Advancement of Science" should you see fit so to do.

Yours with much respect.
W. Chickering

Prof. Asa Gray.

decided success, in all respects, though the rain prevented my exploring the summit as thoroughly as I desired & intended. I obtained on the mountain

Diapensia Lapponica
Empetrum nigrum
Rhododendron Lapponicum
Lycopodium procumbens
Kalmia glauca
Vaccinium vitis-Idaea
" uliginosum
" ——— ———
Salix repens? &c &c
and about the base.
Platanthera orbiculata
" Hookeri
" dilatata
" obtusata
Listera cordata
Callorhiza verna
Alnus viridis
Carex divica? &c. &c.

I intend either this Fall or next, to spend two or three weeks upon & around the Mt. exploring it as thoroughly as may be in that time, and hope I may be able to prepare a paper on the Flora of the Mt. that may be of some interest.

I have noticed some rather remarkable facts about the "Nardosmia" this summer. It occurs very plentifully all around here, and I traced it to within a few miles of the base of Katahdin, but have found it in flower in only two places near here, and one place in Aroostook Co. some 75 miles distant, by the roadside in dense woods.

Its most profuse flowering here, was on land newly burnt over, & I conclude that it may live in the shade, but needs the full power of

National Deaf-Mute College,

Washington, D.C. May 11 1881.

My dear Mr. Watson

I send by today's mail, a small package containing ~~Arabidopsis~~ Spiranthes Bramensis and Rudbeckia superstis, Bigelow - Balsam Mts. - Haywood Co. which will, I hope, commend themselves to your critical judgment. Dr. Porter seems to agree with me as to the former, which I sent him, & Dr. Vasey coincides with me as to both.

clusters of Alders or Rhododendrons, & thus protected.

Some of these days, I hope to go to Peaks of Otter to look up Sil.

I shall hope to look in upon you before long.

My summer plans include July at Kennebunk, Aug at Moosehead, with Katahdin thrown in, and Sept. at Bran, & Parts adjacent.

Yours truly

J W Chickering

P.S. Has your attention been called to the fact, that neither in the "Index", nor in "Flora of N.A." do Cyrilla & Clijtonia appear?

I also enclose two Solidagos, "Canadensis" which I think is genuine, & "Juncens, var. glabra", so named because it seems to agree with a S. C. specimen from Chapman, better than with anything else.

Please let me know your opinion.

As to Lilium Grayi, I found my first specimen which Porter, Meehan & Co. were with me. It seemed to us so very distinct, that, (not having your notes) the fact that there could have been any doubt about its being a good species led Dr. Porter to suspect that I had detected a third species.

We found in all about 20 specimens, & we believe in it. I sent a lot of bulbs to Goodale & I shall be glad to know how they flourish.

It is rapidly being exterminated on the pub. by cattle & sheep & especially hogs, which root up the bulbs.

All we found, were in

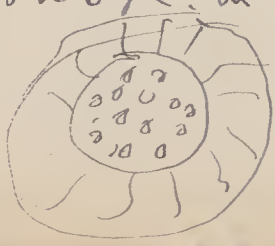
Dennysville Me.
Aug 28. 1889

My dear Mr. Watson

I have not found any great number of botanical incognita up here, but I have two items to communicate.

One is the centrifugal manner of growth of Mertensia maritima, under favorable circumstances.

A seedling starts in the sand, and at once begins to "spread itself" till at last it forms two concentric circles, the inner a mass of large leaves 3-5 in. long one a foot or two feet in diameter, the outer made up of fine flowering branches with smaller bract-like leaves, thinly, and 5 or 6 ft. in diameter,



The other is a Nabalus which I can't locate, from Northeastern Maine, the leaves as glaucous as Mertensia, green above and pale beneath; radical, ovate oblanceolate, on long margined petioles; cauline, ovate, partly clasping: plant smooth 1°-2°, with a spike simple and strict when I saw it, though perhaps expanding later, nodding with bristly-hairy involucres, and cinnamon-colored flowers.

You needn't bother to answer this as I shall try to call and see you, and bring the Nabalus along.

We stay here a fortnight longer and then gradually work back to Washington.

Yours truly

J. W. Hickening.

NATIONAL DEAF-MUTE COLLEGE,
KENDALL GREEN,
NEAR WASHINGTON, D. C.

P. S. Please let me know if you come up to the Academy meeting this spring.

March 13 1890

My dear Doctor

One of the plants I had to show you, when I missed you last fall was a Pentstemon, I found in a moving lot in Hennebunk.

I queried about it, and finally took it down to Dr. Rosey who pronounced a flower and dissected it, and made it out P. tubiflorus, all the way from Arkansas.

I had never seen it round there before, and I now wonder whether it is the P. pubescens, found in

Maine by Miss Furbish.

I also got hold of a Prenanthes away up on the St. John, not quite Goodale's P. Maineensis, and not exactly any other described.

I have not more than looked at the new edition of the Manual yet, and have just written to see if they are to have any of them bound up with flexible covers, as with Coulter's "Botanists Editions".

I have some notes on the relative abundance of different Asters and Solidagos in Eastern Maine, relating to what might be called landscape botany, which you may have if you want them.

Hoping to see you next summer,

Yrs. truly J. W. Chickering,

GALLAUDET COLLEGE,
KENDALL GREEN,
WASHINGTON, D. C.

June 18. 1897

My Dear Sir

It gives me great pleasure to accept the Honorary Membership of the Josselyn Botanical Society of Maine, of which your letter informs me, and I thank you and the Society for the honor thus conferred upon me.

Yours very truly
J W Chickering

Mr. Merritt L. Fernald
Secretary

San Jose April 27th 1891 P.O.Box 286

Sereno Watson Esqr
Curator Harvard Herborium;

Dear Sir; If my manner of ad--dressing you, should not be technically correct, I think you will excuse an error of that kind, in a person who has been continuously on the West side of the Rocky Mountains, since 1852, with the exception of six months in 1876.

It was my fortune to be appointed by the President of the California State Medical Society, to open the discussion on the Report on Indigenous Botany etc, at the meeting of the Society, which was held in Sacramento, during the 21st, 22d, 23d and 24th of this month. I received notice of the appointment about six weeks before the meeting was to be held, and I thought it would be a proper thing to do,, to write out a brief account of the State Geological Survey, and especially of that part of its history, in brief, connected with the Botan--ical department thereof. My paper was referred to the Com--mittee on Publication, and probably will be published in the Volume of Transactions of the Society. But I will have op--portunity to make any little change, in regard to matters of which I may procure additional information; and I would like to be able to make a more definite statement in regard to the gentlemen who were most prominently active in performing the work for the two volumes of the Botanical Department Report,

and if you will be so kind, as to answer me the following, it will enable me to do so. When did Professor Asa Gray die?

Stated as it appears in the records of Harvard; What chair did the Professor occupy? Professor W.H. Brewer, it is stated in the prefatory writings of Professor Whitney, went East to take a chair in the Sheffield School of Sciences of Yale College. Please state what chair, and if he still occupies the same chair; and if in some other position, please state.

Professor Whitney, stated that you were the Botanist of the Fortieth Parallel Survey. Will you be so kind as to state the years you were connected with that Survey; and in a few words, the purposes and work of the said Survey, as my memory serves me badly in that matter: in fact I think that that service was performed, at a time when I was on this Coast, and so busy with the affirs of my immediate surroundings, that I hardly took cognizance of what was happenning elswhere.

Professor Greene of our State University, has told me that you are the Curator of the Harvard Herborium, at Cambridge.

If occupying that position, at present, please so state; and any circular or announcement which would give information concerning the Herborium would interest me. A few words as to the occupation of Professor Whitney since he went East last, would also interest me; and of his present position; if still at work.

I will send you one or more papers which I have heretofore read before the State Medical Society. By

By complying, in full, or to the extent which you will be able, without inconvenience, you will greatly Oblige,

Yours Very Respectfully;

Wm. McKinney M.D.

P.S. Please excuse many machine mistakes, as I am not ex--pert enough in the use of the machine, to write with it, with--out making mistakes, unless with slower performance, that I have time to spare for it.

Wm. McK.

Please be so Kind as to answer without delay, as my paper may be required by the printer soon.

Wm. McK.

Original

San Jose May 18th 1891 P.O.Box 286

Sereno Watson Esqr

Dear Sir;

Your letter of the 6th inst, came to hand in due season, and also the Memorial of Professor Asa Gray, the perusal of which, interested me very much. His was a life of even tenor, and always actively progressive; whose works have been helpful to many individuals, an honor and an advantage to the great Institution, with which he was connected, beneficent, as regards his community, and a benefit to his country and his time. His was a character to respect, to love and admire.

Your letter contained the full answer to the inquiries, which I made of you, and for which I am much obliged.

The statement which I made to the State Medical Society, of the development of the Botany of California, is but a brief sketch, and the subject is deserving of a more extended his--tory, but it happenned that the appointment of the President of the Society, under which I acted, was addressed to my former residence, in San Francisco, and from thence, through over-sight, was not forwarded to me; and when the President, who lives in Sacramento, had learned of my removal to this place, and wrote to me here, it had got to be close on to the time of the an--nual meeting; so that I had but little time for the prepara--tion, especially as my sources of information, were mostly in San Francisco and at Berkeley; and then my health is such

that I am not able to perform work rapidly. The brief sketch may serve as a hint to some future historian of the State, and I believe that the Whitney Geological Survey, should occupy something of space in its history.

The California State Medical Society, publishes its Transactions in an annual volume, the number of copies published, not being much in excess of the membership; but I may have my brief paper re-printed, together with another brief article which I have not yet re-published, in pamphlet form; and in which case I shall take pleasure in sending you a copy; but when a man has arrived at about the allotted seventy years and has become encumbered with many disabling infirmities, he is unable to make definite calculation, as to what he can perform in the future.

Yours Very Truly;

M. M. Chipman M.D.

P.S. I will send you a specimen of Chinese coinage, of which I have a number. The coin is not inuse here, except among the Chinese themselves, and I am informed is of but lit--tle value; but I have not met with any one, who is able to decipher the characters with which it is impressed: Perhaps Harvard may have a scholar who can do that.

I thought that, perhaps, it might be an addition to your coin collection, if you are interested therein, or that of some friend.

W. A. C.

Choisy

Genève 6 Aout 1850

Monsieur,

J'ai eu beaucoup de regret, ainsi que ma femme, de ne point vous rencontrer hier à l'hôtel; vous venions de partir pour la promenade : nous avions espéré faire la connaissance de Mad^me votre épouse; pensez-vous pouvoir nous dédommager en venant chez moi passer votre soirée de Mercredi? nous aurions un vrai plaisir à vous recevoir; je dois au reste vous informer que ma femme sera chez elle toute l'après dinée; ainsi dès que vos affaires ou vos courses seront terminées, venez vous établir chez moi; vous y trouverez amplement d'amusement de la conversation Anglaise. — Mon fils qui vous porte ce billet a ordre d'attendre la réponse; j'espère qu'elle sera favorable et vous prie en attendant d'agréer l'expression de ma considération distinguée

P. Choisy Cw^r.

Rue des Chaudronniers. n°. 1. 2^d Etage.

MAGAZINES and REVIEWS.

Several thousand different kinds of Periodicals kept on hand and for sale, at low rates. A specialty made of supplying Back Numbers, Volumes and Sets. The largest assortment of its kind in the world.

Subscriptions taken on the most favorable terms, for any Periodical either American or Foreign.

Books and Magazines bound in a durable and artistic manner and at satisfactory prices.

JAMES W. CHRISTOPHER'S

American & Foreign Book & Magazine Depot,

No. 47 DEY STREET,

NEW YORK CITY.

3-22-90

Mr Sereno Watson,
Botanic Garden,
Cambridge, Mass.

Dear Sir,

I can supply No. 30 of Vol II of the Nation, to apply on your list at 25¢ post paid; also the numbers of the "American Naturalist" as follows:-

Vol. ~~XVIII~~ Nos. 5, 7, 8 & 10 at 21¢ pp.

I think it would be hardly possible to obtain the titles & indexes of the Nation which you mention. I would suggest that it would improve the appearance of the volume if you should take a title page of the current vol. & alter the No., which can be done & the alterations not be very noticeable.

Yours truly Jas. W. Christopher per

MEMORANDUM,

To Mr Sereno Watson
Cambridge
Mass

FROM THE

American and Foreign Book and Magazine Depot,

47 DEY ST. NEW YORK CITY.

A large supply of Books and Back numbers, of several thousand different Magazines, Reviews, Scientific and Illustrated Papers, Serial Publications &c, kept on hand and for sale at low rates; the largest assortment of its kind in the world.

A specialty made of supplying Back Numbers, Volumes and Sets.

Books and Magazines bound in a durable and artistic manner and at satisfactory prices.

Subscriptions received on the most favorable terms, for any Periodical, either American or Foreign.

J. W. CHRISTOPHER,
47 Dey St.

New York 3 - 16 1889

Dear Sir,

I send by mail today the Nos. of Am. Naturalist mentioned, for which find bill enclosed.

I regret I cannot supply the Nos. of Nature wanted.

Yours truly
Jas. W. Christopher
per

A. & J. R. CHURCHILL,
SEARS BUILDING,
199 WASHINGTON STREET,

ASAPH CHURCHILL.
JOSEPH R. CHURCHILL.
JOHN M. B. CHURCHILL.

BOSTON, Aug. 20. 1891

Dr. Sereno Watson

Dear Sir:-

Please accept my thanks for the papers which you sent me this week -

I have been doing some collecting at Grand Manan Island, N.B. & my attention was particularly attracted by Euphrasia officinalis & its so called variety Tartarica, both of which grow there abundantly but under somewhat different conditions, and always very unlike each other - I collected considerably both; & sometime when I can get time & get my specimens together I want to talk with you a few minutes about them; particularly as to whether there is not more than a merely varietal difference between them -

I think neither the Manual nor the Synoptical Flora credits the variety to that region - Yours truly - J. R. Churchill

West Belfast Sept 23/49

Dear Sir

I received your favor of Sep 3d in due time. In respect to the aestivation of the corolla I have made constant and careful observations. Since I wrote you last I have not been able to find a single flower bud of either Gerardia tenuifolia or pedicularia with otherwise than the lower lip of the corolla external, excepting one of G tenuifolia and that thus ( ). As far as decided specimens of G flava (out of flower long before G pedicularia) will permit examination the aestivation is like the foregoing. In comparing the aestivation of Impatiens fulva and the unspotted Imp. with the diagrams and description in Gray's Flora Bor Am I find it to be almost constantly the reverse. I have from time to time examined a great many; to day out of 53 buds I found but 4 thus ( ), 4 ( ) of the corolla lobes, 2 also thus ( ) the smaller lobe partly within and partly without. With the observation that I find many of the lateral sepals of Imp. fulva inclined to be spurred I send you three flowers having one of the lateral sepals spurred on the back. Perhaps this may go a little way to show their affinity to the large spur. I have gathered and put in press several full branches of Impatiens. The whole plant is so large for my press papers that it would be difficult to press the whole

I could do so if you wish a still fuller one.
I have gathered seeds also. It is difficult to get them fully changed in colour although I suppose if the pods burst upon the least touch and the seeds are somewhat brown it will do. The Acalypha is very common here, I had thought that the spike of the one I sent you was undeveloped, but I find it constantly short. You say New Jersey and Southward? I wonder it has not been noticed here before.
Upon more recent attention to the Lysimachia while growing in the woods the habit shows its affinity to L. stricta and yet it strongly reminds one of L. quadrifolia by its large leafy base of the racème, &c. I have pursued my examination of the pollen of Spiranthes, which resulted beautifully. I give you the notes as set down in my appendix. "The pollen masses of Spiranthes gracilis are composed of obovate cleft laminae, as A B C. One of the masses B C the cleft, and the two sides B and C one placed face to face with the outer edge (as the mass, attached to the stigma is situated) overlapping the inner; each of these cleft divisions B, C, is composed of two laminae, not open except the cleft but opening from the outer edge inwardly, between which the pollen grains are attached by bodies." Pollen masses of S. cernua shaped as B more slender oblanceolate cordate; the divisions B and C almost evenly oblanceolate as C differing from gracilis which is as C, plano convex. I find that the older the flower or bud is, the less apt are its pollen masses to be separated by so as to show the laminae, being rolled more closely than when young, also the divisions each side of the cleft are with difficulty separated into laminae but the younger the flower the more easily is the lamination made visible; so that in the smallest buds the mass in each lobe of the anther appears composed of four laminae accumulent on the stigma. I certainly must accept of your kind offer to have me a Chevalier fitted up. I suppose it could be done within the few days that I may stay with you.
Spiranthes cernua. I find is quite hoary and somewhat roughlike on the upper but might not the shape of the pollen masses be fair to distinguish species, for instance S. latifolia from aestivalis. Is Ambrosia strictly monoecious, I have found plants entirely covered with seeds and also others with fertile and sterile flowers in the same involucre. I could not be deceived in this, for the fertile had gone to seed whilst the sterile were yet in flower. I see that the staminate flowers have what appears to me at first like a radiate capitate stigma which I find is present sometimes before and sometimes after the anthers. This plant puzzled me indeed, I certainly thought its flowers were perfect. I have what I suppose is Potamogeton natans (var. fluitans), according to your manual at least, but comparing with Mr. Tuckerman's observation I find it differs much. Mr. Tuckerman in Sill's Journal May 1849 makes it a distinct species. I differ thus, "floating leaves attenuated into the plano convex (cross section, deeply convex) footstalks, with sometimes two lateral obsolete prominent nerves, on petioles two and even three times longer than the leaves (2' or more long). Stipules strongly two ribbed at the base", I find the outlets

(which he quotes simply "nutlets compressed acutely carinate) obscurely laterally keeled, epocarp removed as in Pratens, I shall make more extensive and strict examination soon. I have Rudbeckia hirta which you have located Western N York &c I found it in June (which agrees with Eaton's manual) in a meadow like spot but not near to I have not seen it elsewhere, I have examined the glands of Elodea Virginica and found the offering from discrip in General Flora &c being shaped thus "Corrections, Synopsis of Compositae, for fives read fine page 186, line 16 from top — Page 476 line 8th from top for 5' read 5'' Potamogeton oblongus, for 1' read 1'' — I shall be in N York on Sep. 28th, and shall soon proceed to my Uncle's in Mansfield just below you, where I intend staying a short time, from thence you may expect me, I suppose in the last part of the second week of October I suppose I will have to go to Boston before getting to you, What kind of a conveyance is there to Cambridge and where shall I find it

Very truly yours

Henry Ramsey Clark

H. R. Clark

Sashing MD

Sept 25 1845

Washington, D.C.
Oct. 4, '91.

My dear Dr. Watson,

Your kind note with the enclosed check was duly received. Thank you very much for both. Yes, I am fairly settled now, tho' it has taken me until the 1st of this month & become rd. Coming directly to friends I was not in a hurry to fix upon a boarding place.

J. A. Clark.

and have, therefore, been quite happily in all respects. I have also gotten into the swing of my work as well as it goes easily and pleasantly. Dr. Darey, his daughter, and the assistants have been very civil, so that the change from the place, and different environment generally have had little effect. Last week I had the pleasure of dining with

Mr. Rose and his family. The "Rosebuds" are as cunning as buds should be. Mrs. Rose is a charming little mother in the new home, and I quite anticipate further acquaintance with her.

Please give my regards to Dr. Robinson, Mr. Fernald, and to Kitty.

With my many kind remembrances,

Sincerely yours

Josephine A. Clark.

Washington, D.C.
Nov. 6, '91.

My dear Dr. Watson,

May I trouble you to send me a book which I think I left at the Museum library? It is the Catalogue of the Library Bureau supplies. I have sent to Boston for a copy, but the last edition is exhausted and it will be several months before another will be ready for distribution. If you have found this catalogue of any use to you, or think it might be in the future, I will return it after making out an order for some supplies from it. My work goes on

J. N. Fiske

very pleasantly, and I begin to have a little to show in the way of a catalogue. The collection of botanical books in the Agric. Dept. does not compare very favorably with the Museum library, yet there are more good books scattered about in the Divisions than I at first suspected. I hope to find out before long just what the resources are. It would give me much pleasure to hear what the great news is at the Museum, and who may have come to the library in my place.

Please give my kind regards to Dr. Robinson, and to Mr. Fernald, also to Miss Kitty, if she is still with you. Very truly yours,

Josephine A. Clark.

Perhaps I ought still to keep the catalogue above mentioned. It was in a pamphlet by itself in the end of my table memo book.

J. A. C.

56 I St. N.W.
Washington D.C.
Nov. 10, '91.

My dear Dr. Watson,

The book was rec'd this afternoon, thank you for the favor. The accompanying letter was my welcome, and from it I can fancy you all busy as ever, and quite as I left you. The right person for the Library will put in an appearance in due time

no doubt. I'm sorry, too, to have you detained with the incoming pamphlets, periodicals and the like. I wish I could wait the dog table before the windows a few afternoons a week and keep it clear for you.

About the indexing of the De Candolle works. I am quite sure I finished the D's. The De Candolle pamphlets I had not indexed. So there

come back reports of them you cannot find? Should be sorry if I have skipped anything. I might not find time. Anything that will keep, just lay up for me, and I will make amends when I come home in the late winter or early spring for a short vacation.

Yours truly,

Josephine Q. Clark.

214 Beacon St —
Boston —
2 October 1890.

Sereno Watson - Esq
Dear Sir -

I have lately returned from the Sandwich Islands and am the bearer of some botanical specimens from Mr. Wm. T. Brigham - He also wishes me to get some information from you as to kinds of paper for drying and preserving plants. Would you kindly let me know an hour in either afternoon or evening when it will be convenient for me to call upon you and whether at your home

on the Botanic Gardens - I can be in Cambridge any time after three o'clock should the afternoon be more convenient -

Very truly yours

Wm. B. Clark.

214 Beacon St.
Boston
7 October 1890.

Serno Watson - Esq -
Dear Sir -

Thanks very much for saving me the trouble about the paper but my commission from Mr. Brigham is only to get the samples and commercial titles and sizes and give the same to Messrs. Charles Brewer & Co. 27 Kilby St. Boston. They are to buy the paper, receive and ship the package to C. R. Bishop of Honolulu. May I then ask Mr. H. B. Seymour's address as well and hope you have not yet taken the extra

trouble of the ordering —

Yours very truly

Thos B. Clarke

214 Beacon St.
Boston
11 October 1890.

My dear Sir -

I am sorry you have thought me capable of such treachery. Of course I shall have the paper bought of Mr. Seymour, and very much obliged to you indeed for letting me know about him. Mr. Brigham's varying instructions seem to be responsible for the state of affairs. His directions to me are only to get the samples & name and have Brewer & Co. buy and ship. Also he says in my list 300 dozen instead of 200. Your list may be right but of course I must stick to the one I received in order to avoid responsibility. As Brewer & Co. will have the payments to make they will want to purchase direct and not take a done-up pack-

ages from a third party.
I hope I justified myself with you.

Very truly yours -

Wm. B. Clark.

214 Beacon St—
Boston -
14 October 1890-

My dear Sir -

I must write you just a line more to say that my word "treachery" must not be taken at all seriously. It was not by any means so intended - Also I more than appreciate the very kind intention in what you did, and it would indeed have been the easiest way. But it could not be so because these supplies are being bought by Mr. C. R. Bishop, who builds and endows the museum, though at the direction of Mr. Brigham. Mr Bishop is an exceedingly precise business man not to say suspicious of any expenditure not exactly following his directions. He would not have tolerated for a mo-

ment my buying the paper and handing to them with the bill, that is, to their agents. Brewer & Co seem to be equally suspicious and I rather gathered that they thought the prices I presented (from Mr. Seymour) might be improved upon, though I strongly stated that that was the place to buy according to the directions that the purchase was to be made when you recommended. Brewer & Co. even went so far as to get up a pretext the same night to send me a note here so as to get an answer showing that I was the person who had given the address to them that morning. They have evidently felt before now one of Mr. Bishop's sellings for mistakes and do not propose to make another especially as Mr. Bishop holds the strings of everything in the islands, being and all. So you see that although I only undertook the commission as a favour I could not recover. I think you again for what you did for me and for the intuitions which Mr. Bingham's letter caused to necessary.

I shall try in my afternoon walk to see you at the Herbarium before long if it would not be an interruption.

Very truly yours
Wm. H. Clark.

SERENO WATSON,
Curator.

HERBARIUM OF HARVARD UNIVERSITY,
BOTANIC GARDEN, CAMBRIDGE, MASS.

Sereno Watson - Esq. -

Dear Sir -

I am sorry some special day was not fixed for me to find you as I am so unfortunate at my first trial -

I have the specimens sent by Mr. Brigham about which I presume he has already written you -

As Mr. Brigham has just been appointed curator of the new museum in Honolulu, he wished me to get from you specimens and special names, and where obtainable, of kinds of paper: 1st - for genus covers

2nd - " species sheets

3rd. Salem Dryers -

As I cannot well be out again till too late for the steamer of the 18th for the islands, could you kindly mail the samples to me at 214 Beacon St. Boston -

And greatly oblige

Very truly yours

Wm. B. Clark.

Dear Watson

Perhaps you have already known about this collection. Yours G.F.G.

Clark

151/43

45 Torrington Sq.

14 May 1890.

Dear Dr. Goodale,

One of the members of the Chinese Customs Service, Dr. Henry by name, while stationed at Ichang some 900 miles up the Yangtsze River made an important collection of the plants of Central China. They are being arranged now by the Kew authorities & in about two months the duplicate sets are to be for sale.

Each set numbers about 2000 & roughly the price will be £20-30 a set. Mr. Henry has no pecuniary interest in the sale, I believe. But it wd. please him to know that Harvard possessed a set of his gathering. The Kew people will give you every information if you care to ask. I thought I wd. tell you of this so that you wd. have time to think of it before you prepare to go on leave.

Please give my kindest regards to Mrs. Goodale & yr. daughter & my best wishes for the health of all at 54.

Very truly yours

C. C. Clarke

I leave for New York by the 'Etruria' of 7 June.

MY DEAR DR. GRAY,

THIS IS A PHOTOGRAPH OF A LARGER PHOTOGRAPH THAT LILIAN GAVE ME ONCE. I SUPPOSE IT IS OF A EUROPEAN OAK. ARE THE OBJECTS REPRESENTED ON THE TWIGS, ACORNS OR GALLS? I THINK THE LATTER. EVERYBODY ELSE SAYS THE FORMER. HAS ANY OAK, ACORNS THAT LOOK LIKE THEM?

PLEASE ACCEPT MY BEST WISHES FOR YOURSELF AND MRS. GRAY FOR THE ANNIVERSARY OF THE THIRD.

FOUR WORDS IN REPLY WILL BE ENOUGH, EITHER;—
''CANT TELL FROM PHOTOGRAPH''
''ACORNS OF QUERCUS ''
''NOT ACORNS--POSSIBLY GALLS''

AND PLEASE SEND REPLY AT YOUR LEISURE.

RESPECTFULLY YOURS,

Cora H. Clarke

JAMAICA PLAIN,
MAY 1ST, 1887.

2 Mount Vernon
Hampstead, London
May 15/66.

My dear Sir, I now forward you the Copy of the work for which you favoured me with your subscription in 1859. The price to subscribers is £1 5/- which is more than was named in the Prospectus you received but as the work has received many additions since then I feel so well assured that you will not complain of the increase price that I forbear offering any further explanation.

From the very favourable manner in which you referred to my papers in your friendly note received in 59 I feel much interested in the opinions you will form of the work; & if you have any enquiries to make (which I cannot help thinking probable) or any critical remarks to offer I shall feel much pleasure in replying to you. I have thought that Nochysiaceæ should go in Table VI. since the Tables were printed & of my Table IV is a natural assemblage of plants your view of the affinities of Ceratophyllum

well act an important part in the Natural System.

With great respect
Believe me dear Sir
Yours very truly
B. Clarke

Dr Asa Gray

P.S. I enclose two copies of a small work on Cod Liver Oil (which I have also sent to Dr Torrey) which as it was written some time since contains errors but none of any medical consequence. Gadus callarias is (as Dr Gunther of the British Museum says & I have no reason to doubt it) the same as G. morrhua the common Cod Fish of England & Newfoundland; & Dr de Jongh's Cod Liver Oil owes its colour no doubt to the heat employed in its manufacture.

As far as I can guess Dr de J's oil owes its superiority to the high northern latitude of the Loffoden Isles & the mode of manufacture, but one would think that the high northern latitude could not have much to do with it.

Dr de Jongh's oil has a very peculiar fishy flavour quite different from English Cod Liver Oil but the very best Newfoundland oil is wanting in this & is in fact just like our English Oil — Some oil from Halifax Nova Scotia at the Exhibition of 1862 remained transparent at 30° F. but as well as I could judge it had just the same taste & flavour as our English Oil & was quite pale in colour. Some time since I supposed the peculiar taste of Dr de Jongh's Oil was owing to some adulteration but I have now no reason whatever to think so.

I am not aware that there any testimonials from medical men to show that Newfoundland Cod Liver Oil is superior to English Cod Liver oil which probably would be the case if it were so, & my present conclusion is that the superiority of Dr de Jongh's Oil may be owing entirely to its mode of manufacture.

If you believe any opinion of the qualities of Cod Liver Oil of very numerous & most practical medical in England, to be correct, the Americans should be advised to send a Chemist to the Loffoden Isles to learn how the Oil is manufactured there.

I am much interested in this subject because I believe Dr de Jongh's Oil to have been the Providential means of preserving my life as I notice in the Preface; & I hesitate not to assert that Cod Liver Oil pre=

pared by simple expression from the Cod Fish sold in the English Market should never be taken as a medicine so very inferior is it to the Lofoden Oil as supplied by Dr. de Jongh; — as far as doing any permanent good is concerned I believe in many cases it must be <u>really inert</u>.

Dr. de Jongh's is stated as you will see to contain a considerable quantity of volatile fatty acid & the Pale Oils to contain scarcely any. What this is owing to I am at present unable to conjecture. Nor why the taste & smell of Dr. de J's should be so entirely different from simply expressed Oil I am also unable to conjecture, but I quite expect that these are <u>essential</u> to its superiority over the simply <u>expressed oil</u>.

I also enclose some English testimonials on the difference in the medical powers of the oils which probably you have not seen. Mr. Thomas's I regard as perfectly true & most important. It may seem rather unfortunate but I really do suspect that the reason why the Pale Oils sell so much in England is because the Chemists get a greater profit in selling the Pale Oil. It was the Confederate Loan that caused so many of our English Newspapers to be of Confederate tendency.

I also enclose a note "On a mode of preventing the ravages of the turnip fly" which some Agricultural or Gardener's Journal would like to publish perhaps

as this he wanted in some of the warm or tropical countries? In preparing the seed varnish albumen &c. was poured on it & then 2 or 3 of the seeds let fall separately into flour which is of course too much trouble, but this could I believe be done very well by machinery invented for that purpose.

On a mode of preventing the ravages of the Turnip Fly.

I have written a paper which was printed in the Gardeners Chronicle I think somewhere between 1850 & 55 on this subject but I cannot at present refer to it.

The plan is to cover the seed with gum, albumen or varnish so as to make a coat to it. By this it lies in the ground & does not germinate till a heavy rain comes on & there being then plenty of moisture it will grow very rapidly & faster than the Turnip Fly can consume it & so escape destruction; the Turnip Fly is a small beetle.

This does not appear to have attracted attention perhaps because some farmers say they can always grow as many Turnips as they

want but there are certainly many exceptions as the crop plants every year. In such a periodical however as the Gardeners Chronicle probably very few of them ever saw or heard of it.

But it has occurred to me that it would equally well secure a full plant of other agricultural produce such as Mangel Wurzel or Beet which dies more or less if it comes up in very dry weather, because seed so protected would not germinate till a heavy rain fell. Are there ever any complaints in America of the failure of the Beet, Turnip or other crops from the dryness of the weather?

By sowing a mixture of 1/3 naked seed, 1/3 seed covered with a thick solution of Gum Arabic, & 1/3 seed covered with a resinous varnish or a solution of any kind of resin, three crops come up at different times. The seed covered with varnish or resin of course last & not till one or two heavy rains have fallen when they grow very rapidly & so escape both the ravages of all insects & also destruction from dry weather.

As showing how successful this plan is, I may mention that seed covered with wax lies in the ground too long requiring several heavy rains to bring it up, & I should suppose that a part of it would lie without germinating for a whole year.

May not such an expedient

Kipahulu E Maui,
Hawaiian Islands.
March 14th 1881.

Prof Sereno Watson.

Dear Sir.

By last mail I rec'd your kind note enclosing one from Prof Eaton: for which please accept my thanks. By this mail I send to Prof Eaton: directed - inadvertently - to him Botanic Garden, Cambridge Mass; a small package of ferns that I hope will please him. This locality seems to be rich in Trichomanes and Hymenophyllums; and I hope when the weather permits of a thorough exploration of the many deep gorges - in the region of perpetual moisture - that are numerous here, to be able to collect many fine Mosses etc.

With much respect
I remain
Yours very truly
F. L. Clarke.

Santa Monica Feb. 15th 1890

Dear Sir,

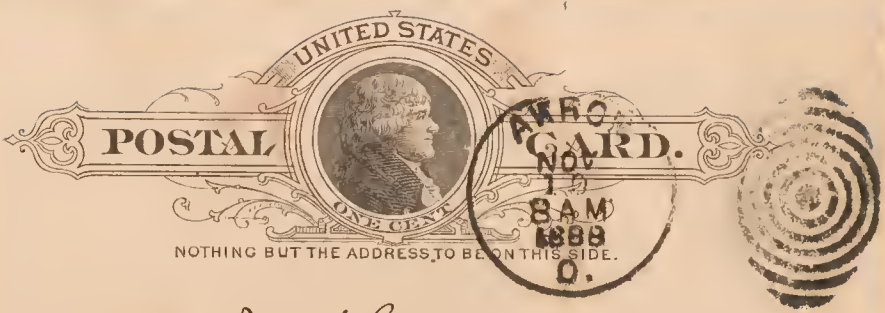
Would you be kind enough to send me: Müller, application of the Darwinian theory to flowers and insects, i see advertised in the botanical gazette.
I send you inclosed 25 cents for the same,

Yours respectfully,

G. Claybrooke

Santa Monica
Los Angeles Co
Calif.

P.S. I bought the flora of Calif. when the second volume was published. Is it possible to get the addenda since that time?
I would be very thankfull if you could drop me a card about it.



Mr Gray
Cambridge
Mass

Prof E. W. Claypole presents his compliments & begs to thank Mr Gray for the copy of "The best of the writings of Dr Asa Gray" recently received.

Akron O. Nov. 9th. 1888.

THE AMERICAN GEOLOGIST.

The only exclusively geological journal in America.

Terms, $3.50 per year. **Single numbers, 35 cents.**

EDITORS AND PROPRIETORS

PROF. SAMUEL CALVIN, *University of Iowa, Iowa City, Iowa.*
PROF. EDWARD W. CLAYPOLE, *Buchtel College, Akron, O.*
DR. PERSIFOR FRAZER, *Franklin Institute, Philadelphia, Penn.*
DR. LEWIS E. HICKS, *University of Nebraska, Lincoln, Neb.*
MR. EDWARD O. ULRICH, *Geol. Survey of Illinois, Newport, Ky.*
DR. ALEXANDER WINCHELL, *University of Michigan, Ann Arbor, Mich.*
PROF. NEWTON H. WINCHELL, *University of Minnesota, Minneapolis, Minn.*

Akron O. May 13th 1880

Prof Lorenzo Watson

My dear Sir

Prof Farlow has today returned my specimen & informed me that he cannot from the material certainly identify them. In the circumstances I am somewhat at a loss. After the information contained in your last I am unwilling to further intrude upon him yet I want to find some one who is more critically familiar with the genus than myself. Can you help me by recommending some one who will take the trouble to examine carefully what are but few specimens & let me know the result.

I asked Prof. F if they belonged to S. delicatissima but he tells me that the part of S. d is "unknown according to the book" & mine is in part. He suggests S. tenuissima, &c. but I can find nothing about it.

His answer however confirms me in my opinion that it is a species not corresponding very closely

fact ale with anything yet described from the N. Am. flora.

Am I right or not in believing that all species of S. having the two rows of scale leaves above are thus far extralimital to us? The specimens concerning which I ask were gathered during a short Southern trip & puzzled me not a little in consequence of the peculiarity that I had previously known only in greenhouse plants. I have no access to any work on the Southern Selaginellas if there is such a book & cannot tell if any any specimen of this type of S is known there

I am really sorry thus to intrude upon you but trusting that you will recognize my difficulty & excuse it Remain

Yours very truly

E. M. Claypole

Can you tell me the character of S. tenuissima, &c

Clay Pole

San Diego Cal. May 6/15

Prof. Asa Gray
Boston Mass.

Dear Sir — Your letter of Mar. 15th was received some time ago, I greatly regret to learn that you have been so poorly, and have your Southern trip may be of much benefit to you. The climate of San Diego is much better than that of any point on the Atlantic coast — I speak from experience — and it would do much for you. I hope you may yet spend some time here.

Enclosed I send a partial catalogue of our plants.

By this mail I send you a parcel containing fifty duplicates of plants previously sent — I send new plants Nos 47 to 281 — inclusive.

The duplicates are

59 Antirrhinum Cornutum, 88 Cucurbita foetidissima
36 Nicotiana Bigelovii, 9 Lupinus succulentus
89 Ancistrocarpus Oligomeris, 65 Phacelia ramosissima
50 Sphaeralcea grossulariifolia, 33 Eriogonum vestitum
42 Sedum Nevadense, 40 Chorizanthe fimbriata

The new plants are — 281 in all — I can guess at —

217 Geranium, 229 Lemmonsia Californica
218 Bonnetia lobata, 221 Calochortus splendens
226 Phacelia cerasifolia

228 Saxifraga V-a
229 Eriogonum (Oxycargum?)
230 Phacelia serrata
231 Asperistum angustifolium
232 Ceanothus rigidus
234 Ribes ~~[illegible]~~ prae[illegible]
236 Antennaria Fremontii
238 Cardamine
241 Viola ovens
247 Oxalis elincta
248 Onosmodium Calᵃ
249 Leptosyne Douglasii
250 Tilia ~~[illegible]~~
253 Deutzia
254 "
255 (Alnus viridis)
257 Dipsacus fullonum?
258 Castilleia
260 (Euphorbia) 260
261 Matricaria discoidea 261
264 Deutzia virgeneacay?
sea beach
267 Abronia 267
268 Pickeringia montana

270 Dendromecon rigidum
271 Fremontia Cal
273 Layia
275 Geranium Carolinianum?
278 Chorizanthe (procumbens?)
280 Ceanothus ~~[illegible]~~
Shrub 5 to 8 ft high
293 Yucca (whipplei?)
many slender leaves at
root, radical leaves —
plant dies after blossoming
one, grows on rocky mom-
tain sides; flower, leaves,
capsules, seeds dark,

I will keep a watch for Nicotiana
Digloviii, I will send you more of it,
Macelia ramosissima var hispida grows in the
County about 20 miles from here, but I will
do the best I can with it,
I hope to send you 200 new plants
this year from this section
Very hurriedly yours
W Cleveland

Mag. 250 I sent you a horned toad (lizzard) and bulbs of Saxifraga Parryi —

~~Hope~~ I have been unable to go out into the country where the Pickeringia Montana grows, but have brought the matter to the attention of Dr Edward Palmer, who is now collecting here, he will get the fruit, if it can be found —

I hope you will command me in any way in which I can be of service to you here.

Very truly yours
D. Cleveland

San Diego Cal. June 8/95

Prof. Asa Gray
Cambridge, Mass

Dear Sir; Your letter of May 17th accompanied by a list of the names of the last parcel of plants I sent you, has been received, please accept my thanks.

I am glad to learn that your health has been improved by your Florida trip, but regret that your cough still hangs on. I believe that a winter at San Diego would do you much good, and hope something may occur to enable you to spend the winter here. Our summer and autumn climate is also delightful, there being no excessive heat at any time. The nights are always cool enough to enable one to sleep under blankets, and flannels are always comfortable. We have one of the most comfortable hotels in the U.S. Our society is exceptionally refined and intellectual. I sent you a pamphlet about San Diego, you would find many pleasant things about

Fountain peac, Sincerely, I would be very glad to have you come here, and it would give me great pleasure to render you every service in my power, Unfortunately, I am a bachelor, which fact decreases my usefulness somewhat — However, this is my misfortune, not my fault.

By this mail I send you a package containing - duplicate plants, seeds, and new plants —

The seeds are 235 ~~Ceanothus~~ Arctostaphylos bicolor,
260 Euphorbia misera,
220 Euphorbia dictyosperma,
248, Oreodaphne Californica,

The duplicates are
80 Penstemon spectabilis,
190 Sarcostemma heterophyllum —
272 Atriplex —
260 Euphorbia misera & seeds —
220 E — " dictyosperma & seeds —
65 Phacelia ramosissima var. hispida?, about which I am uncertain,
112 Cycis Californicus —
97 Chaenactis artemisiifolia
171 Antirrhinum Cortesianum
235 Arctostaphylos bicolor & seeds —
262 Nigiuerria laciniata

251 Malacothrix Fasciculata?
226 Clematis pauciflora? I am sorry, I fear there are no fertile flowers on them, If not too late to get flowers or seeds when I receive your letter!

I also enclose a specimen of a fern I found here, which Prof Eaton pronounces new, and names Cheilanthes Clevelandii. I sent you the fern before.

It is too late this season to get fertile flowers of Oreodaphne Cal,

The new plants I send are 282 to 316 —
290 Oenothera, looks different from O. Cheiranthifolia
291 Penstemon Cordifolius, var. diffructicosa —
294 Mesembryanthemum dimidiatum,
297 Algarobia glandulosa,
298 Vindelia — ?
299 Gilia — microantha?
300 Castilleia —
301 Lupinus —
303 (poor specimen but a, brought to me)
305 Cucumis —
306 Penstemon — — found in Lower California, about 80 miles below boundary —
307 ——— Low, Cal " " " " "
309 Solanum Umbelliferum —
310 Franseria grandifolia?, The botat family is this (now assigned?)
311 Hesperocodium maximum,
312 Orabanchaceae
313 C
315 Lathraea Tenera,

shrub, It is abundant from the Sea Coast to an altitude of 2500 ft among the mountains, and is largely relied upon for bee food — making excellent honey. It is in blossom during June & July —

321 I am unable to tell you whether Monardella Breweri is an annual.

I will be very glad when your Flora of Cal. is published.

Euphorbia misera is quite abundant about the granite Boundary Monument on the sea shore, some 15 miles from here.

Arctostaphylos bicolor is common among the mountains some 40 miles from here. I will send you more fruit, what I send is from a shrub growing in town — wild —

I will also send more of Andibertia Clevelandii, Clematis pauciflora grows in the valleys about town.

I hope to send the duplicate plants & a few new ones within ten days.

Very truly yours
D. Cleveland

Doc. Frankenia — belongs to Frankeniaceae
Tonquiera splendens, belongs to Tonquieriaceae — 1/2 Sullivan
Boundary Vol 2 — Botany —

San Diego Cal July 16/75

Prof. Chas. Sprag
Cambridge Mass.

Dear Sir: Your note of the 8th inst, accompanying the name of plants sent you has been received, for which I thank you very much. I am glad to learn that the lot contained so much of interest.

The fruit I sent as of Euphorbia misera 169 is not of that plant, I find on examination, and I am in doubt if it is of 296 — Argemone Californicum. I sent some of the leaves in this letter, when the plant blooms I will send flowers, — say in March next.

I will send you duplicates of
284 Monardella — ?
293 Mesomacaulis Nuttallii.
311 Sedum variegatum, n. sp.
312 Photinia arctostaphylifolia
323 Microseris Lindleyi — of the others I have no duplicates at present.

284 Monardella — ?, is abundant in the mountains some 40 miles N.E. of San Diego.

288 Dicentra chrysantha, grows near Pomeroy in dry beds of streams, about 25 miles from here.

291 Pentstemon cordifolius grows in the mountains N.E. of here, say 40 miles back —

I do not consider about seeing ripe seed, but will try,

294 Mesembryanthemum aciniaeforme grows in the sand along the sea coast close to the water, I have never seen it growing elsewhere, I have no reason to suppose that it is anything but an indigenous growth, I find it 15 miles from Town, far away from any settlement, we have also Mesembryanthemum Chrystallinum, which grows almost everywhere in Saline soil, which I also suppose is indigenous, these two are all of this Genus that I have seen,

296 Lycium Californicum grows in sandy places, and is abundant, I will secure more for you in the season, with fruit, it grows in Town,

301 - Lupinus albicaulis is quite abundant some 25 miles from Town in the Country, - near Poway, & other places,

305 Cucurbita perennis, is very abundant here along the sandy beds of stream, some 10 miles or more from Town, as is Cucurbita digitata, it is now too late for the latter,

308 Pentstemon Clevelandi - with the seed (307) was brought to me from Canon Tantillas in Lower California, about 25 miles below

the Boundary and 80 miles from San Diego, but I received only 2 specimens of each, one sent to you & the other retained, this Penstemon I judge from what is told me grows up above 4 ft high, has flowers of the prevailing color in the specimen sent you, blossoms in May & June, this specimen was obtained about June 30 1875, this Canon is very difficult of access, I hope to secure you seed later in the season, this plant grows at foot of lofty Mountains,

309 Same locality & time of flowering as 308,

388. Phacelia grandiflora is quite abundant near the Light House on Point Loma San Diego, I will get seeds if I can,

311 - Sedum variegatum, this grows in saline soil near False Bay about 7 miles from Town, among what is called Salt grass,

312 Photinia arenarium, grows about 15 miles from San Diego, at base of hills, on road to Poway, I can send you a good lot of it, Does this belong to Orobanchaceæ?

314 Asclepias erio carpa grows in the mountains N. E. of San Diego, some 35 to 75 miles, where it is abundant,

315 Rhus laurina is one of our Commonest

San Diego Cal, July 26/75

Prof. Asa Gray
Cambridge Mass,
Dear Sir,

By this mail I send you a package containing —

1 Duplicates

41 Porlea alcoutia, var microphetra & fruit,

90 Andrieuxia Cleveiandii, color — blue — fades —

235 Fruit of Acoelaphylus bicolor —

A " " " glauca — 2, (perhaps a noth spec

295 Nemacaulis Nuttallii,

284 Monardella — 2,

311 Sedum variegatum — new spec —

312 Phoksma arenarium —

323 Allerosecis Lindleyi —

B — Fruit of plant growing near Rock House, Jamma — Desert — July 3/75 — det by G. W. Dunn — Zizyphus Parryi, Torr.

Mr G. W. Dunn will soon go into Lower Cal, & promises me seeds of the new Penstemon Cleveiandii, Fraxelia tenuifolia, & perhaps other new things, —

I collected the following new plants –

328 } Chenopodium — Near sea beach, San Diego,
329 }
330 } July 20/75

331 Carlowrigia pulverulenta – July 12/75, Mountain, E of S. Diego

332 Mesembryanthemum Chrystallinum July 20/75, near sea beach & in saline soil, wash places, not cultivated here – Very abundant,

333 Astragalus – 2 Julian, S. D., July 10/75

334 – Cajon Valley " 12/75

335 Azalea occidentalis, Cuyamaca Mt, July 10/75

336 – Near sea beach. July 20/75

337 Romneya Coulteri – July 20/75, Valleys 10 miles back –

338 Franseria, streets of S. Diego, July 20/75

339 Ephedra antisyphilitica, Peninsula of San Diego, June 1/75

340 Ephedra – 2, Jamul Valley June 1/75

341 Krameria – 2, Canon Tantillas, Low, California, 25 miles below Boundary 80 from S. Diego, June 28/75

342 – Falls of San Diego River June 16/75

343 – " " " " " " "

344 Lilia – Low, Cal, Las Juntas, abt 20 miles below Boundary June 22/75

345 – Low, Calª. Canon Tantillas, June 22/75

346 Photinia arbutifolia, S. Diego, June 28/75, (with fruit)

347 Asclepias (no leaves growing on plant) Along the Boundary between Upper & Low Cal, abt 60 miles from S. Diego, near Rock Springs June 20/75

348 Julian, July 10/75

349 Desert near Rock House, July 3/75

Dr Edward Palmer has been collecting plants for some time, and will be here in about ten days –

Very truly yours
D. Cleveland

San Diego Cal. Aug 27/75

Professor Asa Gray
& Cambridge, Mass,
Dear Sir: By this mail I send you a parcel containing 37 - plants, I had intended to delay them until I have many more but think you may want them at once for your Flora of Cal, unfortunately, many of the specimens are very poor, but it is the best I can do, —

351 - Gil. All of these plants were collected in July, 1875, and near Julian in this County, unless otherwise noted,

351 Collomia = ~~linum perenne~~

353 ~~Phacelia~~ — ~~officinalis~~

356 Perezia ~~[illegible]~~ radical leaves, or at least radical leaf stems

358 Hieracium — ?

360 - Silene ~~conadensis~~, var. poor spec., from up 3700 ft high

364 Asclepias — Desert —

365 " Banner Valley —

369 - ~~Prosopis~~ juliflora, (P. glandulosa)

373 - Lepidium ~~[illegible]~~ intermedium

374 Apocynum cannabinum

375 (Altheimer) A. rhombifolia San Felipe —

377 Eriogonum ~~plumatella~~ ?, n. sp.

380 Hedeoma — prostrata, Nutt

382 Aquilegia ~~truncata~~

383 - ~~[illegible]~~ Sida hederacea Jamie — Soledad —

304 Astragalus — [illegible], Gray
305 — Impatiens — ?, San Diego, Aug 10, 75.
357 Allophyllus (Dist squamosus ?) San Diego Aug.
386 San Diego Aug 10/75.
190 Trial of Heterogaleana heterophyllum —
[illegible] 5/75
Inclosed you a list of 20 or 30
more next week —

214 Adenostoma sparsifolia —

Very truly yours
S. Cleveland

A good many of these plants were obtained from Dr. Edward Palmer, who has suggested, and knows, that I send them to you, as he cannot forward his plants under a considerable time —

San Diego Cal May 5 1876

Mr Jerome Walson
Cambridge, Mass

Dear Sir: By this mail I send you a pa. Lage containing Nos 414 to 442 inclusive

" 418 San Diego, ~~[illegible]~~ Jan 9/76 Lycium Californicum, Nutt
" 419 " " " Mch 5/76 Cnicidium douglasii, Hk
" 420 Tinfoton, Gardiwater apl 8/76 T. tridentatum, Torr. & Phacelia macrocalyx, Torr.
" 421 " " " Sanicula tuberosa, Torr.
" 422 " " " Sanicula arguta, Torr.
" 423 Lupinus Douglasii, Gray " " L. densiflorus, Bth.
" 424 Allium — ? " " " A. serratum, Watson
" 425 Eutoca (viscida ?) " " " Phacelia Parryi, Torr.
426 San Diego Salt Marsh Mch 5/76 Lepidium nitrophilum Torr.
" 427 " " " " apl 3/76 Lasthenia glabrata DC
" 428 Gardiwater Virginia Lavinsiphon, Gray.
" 429 Erysimum Arkansanum? Gardiwater apl 18/76 E. asperum, Torr.
" 430 Mission Peninsula, San Diego Feb 25/76 Lavatera, n.s.
" 431 Hosackia ? Valle de las Vegas Apl. 4/76
" 432 Bushosa tenuis — Lanatum, Bth., var.
" 433 Orifiamme Canon Trifolium Hallii, Hansen
" 434 " " Cantaurium ?, n. sp. Coville
" 435 " " Stripht. heterophyllus, Nutt.?
" 436 " " Calycoseris Parryi, Gray
" 437 Hosackia " " H. strigosa, Nutt.
" 438 Lupinus " " L. concinnus, Agh.
" 439 (Plant no duplicate) " " Phacelia Ivesiana, Gray
" 440 (~~[illegible]~~) " " Collinsia bicolor
" 443. Chlorogalum micranthum, Torr. = Phacelia Whitlavia, Gray
" 441 Eutoca, Orifiamme Canon May 5/76
" 442 (Plant no duplicate) " " " " Gilia achillaefolia, Bth.
" A. Pleuropogon antennifera
" B. Adolphia Cal.
" C. Adolphia Cal. Orifiamme May 5/76 — no perfect flowers.

D. Phacelia arenaria showing the manner they grow from the rocks. If this plant is a parasite, it is upon Eriogonum tomentosum, as I always find it near that plant. It is too late to collect Malacothrix Clevelandii. I have been too unwell this season to do much. Quite my to collect more of Franseria bipinnatifida? I would not be surprised if your surmise as to its being Franseria tenuifolia is correct. F. bipinnatifida grows in the middle of the street in hard ground, under unfavorable circumstances, and may easily be a stunted growth.

I do hope you will Nos 431 & 432, Have you named all of Dr Palmer's collection? You have only given me the names of certain Nos for which I asked you.

Very truly yours
D. Cleveland

Over_

San Diego Cal. Oct 13th 1876

Professor Asa Gray

Dear Sir

By this mail I send you a package containing a few plants, among which there may be something of interest.

The plants are numbered

444.	Convolvulus?	Valleys,	Oct 17/75
445	Dyanschneria	Criflamme	" 15 "
446	—	Valleys	" 17 "
447	Solidago	"	" "
448		"	" "
449		"	" "
450	Castilleia	"	" "
451	Monardella	Sweetwater	June 1876.
452		Potrero	Sept 20/76
453	Solidago	"	" " "
454		"	" " "
455		"	" " "

456		Potrero	Sept 17/76
456.a		Potrero,	Sept 20/76
*457	Arctostaphylus	"	" 21 "
458		"	" 20 "
459		"	" " "
460		"	" " "
461	Croton	"	" " "
462	Helianthus	"	" " "
463		"	" " "
464	Vicia	"	" " "
465	Bigelovia	"	" " "
A	Cucurbita digitata,	"	" 15 "

B fruit of Euphorbia misera, San Diego June 20/76,
C " " Mirabilis multiflora Oriflamme Oct 15/75
D " " Penstemon antirrhinoides, Potrero Sept 20/76,

*457. I found only one plant, the only one I ever saw, It was not more than two (2) feet tall. The other plants of this genus bloom in the Spring. It seems to me that this must be new. I could find only three good specimens of blossoms, two of which — the best — I send to you.

I found great difficulty in obtaining even the few seeds of Mirabilis multiflora I send to you. They will ~~not~~ germinate and grow I feel sure. The flower is handsome.

If I can be of service to you here do not hesitate to command me.

Very truly yours
D. Cleveland

San Diego, Cal. April 6. 1882

Dr. Engelmann
Cambridge, Mass.

My dear Engelmann,

By this mail I send you a package of plants collected by me in this County last year. I should have sent the plants before, if I had not felt too unwell to attend to the matter.

I have about come to the conclusion not to send any plants to Mr Dereno Watson, nor to Cambridge during your absence. I have sent Mr Watson a considerable number of new and rare plants, and have never received any recognition from him. He has been very generous in acknowledging the labors of the Parish Brothers of San Bernardino, and has given them the justice they deserve. It is not necessary

Murrayton does not notify me that the Cactus seeds are ready. Papers about 1877 in a new species C. Fernandezii

this I have written to Mr [illegible] not to send to him unless his policy towards me is changed.

I have a small table in of grasses & rushes from the County, collected in 1881, which I can send to some one willing to name them.

I hope that you are in good health.

Dr C. C. Parry, Mason, E. Jones & Mr Pringle started this morning for Cañon Santillas Lower California, where Dr Palmer got some good things, though he went late in the season. I think that they will get some new things.

Very sincerely yours
N. Cleveland

I am suffering from nervous exhaustion, Neurasthenia, & can do but little at present.

San Diego, Cal.
May 18th 1885

Dear Professor.

A few days ago, the mail brought me "A Flat Iron for a Farthing", from Mrs Gray, which I think I shall enjoy very much when I read it in the woods among the San Diego mountains this Summer. Please thank Mrs Gray for me, I suppose, as the book was postmarked St Louis, that you are now at home.

I hope that you enjoyed your brief sojourn on this Coast, and that you have pleasant recollections of your visit. Your friends here regret that it was so brief.

Please give my very kind regards to Mrs Gray.

I received from Dr Engelmann a clean check that McNab is absent from Cambridge.

I hope that you have held to be satisfied, and that you have had a pleasant vacation journey.

Very sincerely yours,
J. Chickering

Enclosed I send a P.O.M.O. for $10, for the Synoptical Flora as far as published. If the amount is insufficient, I will remit the deficiency at once.

Mr E. L. Greene returned day before yesterday from the Mexican coast, and is now here. He made a fine collection at Guadalupe and Cerros (Cedros) islands, and at San Quentin and Ensenada on the coast of Lower California, and thinks that he has a large proportion of new species, and several new genera.

I purpose going into the mountains next week for the summer. I shall not be strong enough to collect much

St Paul's Rectory,
San Diego, Calif. Dec. 15. 1887.

Dear Doctor,

I wish you and Mrs Gray a very Merry Christmas and a Happy New Year.

I read the account of the honors conferred upon you in Great Britain with great interest and satisfaction. I congratulate you upon the great work you have achieved, and upon the just recognition it has received abroad as well as at home.

My health has much improved. Quite I saw you at Cambridge. I hope to visit New England again next year.

With the kindest regards to yourself and Mrs Gray, I remain always

Faithfully yours

Daniel Cleveland

San Diego California.
Nov. 12/88

Mr Sereno Watson
Cambridge. Mass.
Dear Sir

The "List of the Writings of Dr Asa Gray" has been received, for which I thank Mrs Gray and yourself. It is a grand record of a noble and useful life.

I suppose that you have seen that Professor E. L. Greene makes a new species of our common Dodecatheon.

Dr Edward Palmer is here, I hope we may be able to secure him some

permanent and congenial employment at San Diego.
His health has improved since he came here.
He is now getting material for you - for a determination of the Salmo-Cattiwatt here.

Very sincerely yours
Daniel Cleveland

Brunswick July 8, 1845.

My dear Sir,

Mr Pierce transmitted to me your letter to him. Mr Oakes is undoubtedly absent. I regret, that you should have given yourself so much trouble. – The Port Folio is undoubtedly most convenient, when the specimen is to be pressed & preserved; but, when the plants are collected on a short excursion to be immediately analyzed, the box seems most convenient. I should not have written you, had I not supposed the article was kept on sale.

Mr Swallow has formed a Botanical Society, consisting chiefly of young ladies, of which two of my daughters are members. The society meets weekly – one member reads a dissertation upon some subject, assigned at a preceding meeting – others are required to collect and analyze certain flowers before the society. It was chiefly on their account, that I wanted the box.

I have a Port Folio, made in the form of a <u>bound folio volume</u>; but it does not suit me. The leaves do not lie open well, so as to afford a plane or horizontal surface. Should not narrow pieces of paper or pasteboard be inserted in binding

at the middle of the volume to remedy that evil?

Can you in 5 minutes give me directions for making a convenient port folio? We have a good bookbinder here. – What kind of paper do you employ?

Have you a specimen of the Rhododendron maximum of Sebago Pond in Maine? It is the most most northern point, at which it has been observed in that State.

Yours respectfully
P. Cleaveland

To Prof. Gray.

Single Rec'd No. 83

PAID 5

To Professor A. Gray
Harv. Coll
Cambridge
(Mass.)

Brunswick June 13, 1845

My dear Sir,

Immediately on the receipt of yours of the 23d of May, I visited the locality of the new Trillium with Mr Swallow, who first observed it. We selected a specimen of moderate size, then in flower, inclosed it in a box, and sent it by Express to Messrs Pierce & Peck, No. 5. Long Wharf, Boston - requesting them to forward it to you - and hope you received it safely. There were other specimens larger and small, not in blossom, but all possessing the same large calyx leaves.

The soil is boggy, in pine woods; and all the specimens in that particular locality have the same character. Mr. S. has this season while on a journey in the interior, examined hundreds of Trilliums; but has seen none like this.

Permit me to say, that Mr George C. Swallow, who first observed this curious Trillium, is a graduate of our Bowdoin College, a fine scholar, and is now a teacher of a High School in this place. He is an ardent, industrious, neat, self made Botanist, having never enjoyed the benefit of Lectures, or the opportunity of examining an extensive herbarium. I hope he may be able ere long to visit your garden.

over

We sometimes meet serious difficulties in our solitary botanical pursuits — and shall perhaps trouble you with some shortness for information.

We have been sorely perplexed with the varieties of Pyrus botryapium, or Amelanchier Canadensis in your Flora of N. America — and were glad to see your remarks at the close of that article on the variety of forms, which it presents, without specific differences.

Don't fail to let us know the results of your observations on this Genus

Yours most sincerely

Prof. Gray

A. Chandler

Single

Paid No. 83

PAID 12½

To Prof. Asa Gray
Harv. Coll.
Cambridge
(Mass.)

Brunswick Jan'y 30, 1846

My dear Sir,

I am sorry to trouble you with the small business of this letter — but you can answer my query in three sentences.

In the first lot of plants, which I attached to paper, and which, for certain reasons, I value considerably, I forgot to use any bug destroying substance. The last summer I found one or two specimens had been attacked.

I then recollected the direction given by the late Mr Eaton in one of his botanical works — viz. dissolve ½ oz Corrosive Sublimate in ½ pint of Alcohol — and apply it to the surface of the plant with a fine brush. He adds that it improves the green color of the leaves.

I have applied the solution to a few plants; but I find, that the alcohol evaporates very rapidly, leaving a thin deposite on the leaf, & giving it a whitish or mouldy appearance.

My single query is this —

To what would you advise me to do?

Would you employ a more dilute solution of the Cor. Sub. — or use some other liquid — If another liquid, which?

How would a few drops of oil of cedar, applied to the paper cover, answer?

Yrs sincerely
T. G. Cleveland

Dr Asa Gray.

Paid. No. 83

Paid 5

To Prof. A. Gray
Harv. Coll.
Cambridge
(Mass.)

Sent to R. W. Chadwick

Brunswick July 30, 1846.

My dear Sir

Yours of the 27th was duly rec'd; but the annual Exam. of our Senior Class prevented me from replying before this day.

We have a Steam Propeller from Brunswick, which unites with the Steamers from Boston or Portland; but accidents or delays frequently happen in the transfer of articles from one to the other.

As the box cannot be very large or heavy, you may send it by the Express. As the Express stops at Portland or Bath, Please attach a card, saying To be forwarded immediately by Stage to Brunswick.

Peleg W. Chandler Esq of Boston, whose family are now with me, will visit us soon, and by him I will send you the money. If you have been at any additional expense to the $10.00, please mark it on the card, which you put on the box.

Our Trillium, in its native bog, continues to exhibit the same peculiarities from year to year. Mr Swallow has pressed a specimen, which he intends

to send you by some private opp.

I believe the oil of cedar to be an effectual safeguard against the attacks of insects. If a few drops are occasionally applied to the covers, containing the specimens of plants, and to the shelf or drawer, which supports them, there will be little danger of the approach of any insect. Its odor is powerful, & continues many weeks. Sometime since I put a few drops into a closet, which was infested with little ants, attracted by the presence of sugar. In less than 24 hours, every one had disappeared, and no one has since returned.

I intend to have some cases or drawers made with cedar boards for containing plants &c

Yrs sincerely

P. Cleveland

Pr Prof. Gray

Brunswick Dec 9, 1846

My dear Sir

Your note is just rec'd. I will gladly take a set of Gayer's Illinois Plants, and will thank you to forward them as soon as convenient.

Please pack them in a box, and send by the Express, to be left at the Portland Stage House in Brunswick. As the box may have to come in the Stage from Portland, and as it may rain pack a little straw under and above the parcel in the box. Any box, not too large, will answer for protection. I have heretofore suffered so much from injury in the carriage of various kinds of specimens, that I have become very cautious.

Please mark on the outside the expense of the box & its carriage to the Express, and I will send the whole amount by my son, who expects to visit Boston in the course of 2 or 3 weeks

With much esteem

yours truly

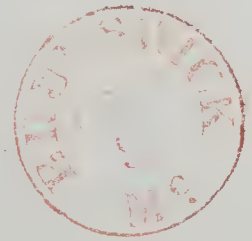
O. Cleaveland

Prof. Gray

Paid No. 83

Paid 5

To Prof. A. Gray
Harv. Univ.
Cambridge
(Mass.)



Brunswick April 13, 1848.

My dear Sir,

With the approaching season for plants, we have the pleasure of welcoming the appearance of your Botany of the N. U. States. The reduction of the genera to the Linnean artificial system will be of great use to beginners & extend the sale of the work.

Under Trillium erythrocarpum I find you have changed the name of Mr Swallow to Sparrow - that is, you have removed him from the genus hirundo to motacilla - but both genera fall into the same Linnean order of Passeres.

I have just received from Mr Oakes a fine collection of Ferns, named as in your Manual just published.

As I cannot make distant botanical excursions, I am obliged to get most of my exercise, at short intervals, in my garden, a part of which I devote to annual & perennial flowers, flowering shrubs &c &c. But I cannot afford to purchase many of these at the prices, at which they are usually sold.

It has occurred to me, that possibly your gardener in thinning, pruning, &c during the

Spring might have some duplicate roots, shoots, or plants, which he would be willing to sell at a reduced price — or perhaps some seeds of annuals,

If such is the fact, please request him to put up a parcel for me — almost anything will be acceptable — mark it Child & Co's Express, and send it to their office, at the Rail road Exchange, Boston. Child & Co will pay his bill for me.

Yrs sincerely

A Lawrence

Prof. A. Gray

Paid No. 83

PAID

To Prof. A. Gray
Harv. Univ.
Cambridge
(Mass.)

of that Aspidium, & found only one showing this anomaly, & that in 2 only of the fronds. It is, so far as I have noticed, confined to the fertile fronds. The branching is a leafy bifurcation at tips, for not more than an inch or two at tips. I have also another Aspidium, somewhere, collected last Summer, in which the stipes branches into two fronds. If you desire it, I will send you a specimen of the A. acrost^es so branched.

Your very resp^ly.

G. W. Clinton.

Prof. Asa Gray.

Buffalo, Oct. 15, 1862.

Dear Sir:

Sometime since I sent you seeds of Astragalus Canadensis. &, afterwards, I think, the few I could collect of A. Cooperi. I have not been apprized of their reception; nor have one or more epistles I addressed to you been answered. Assuming that ~~they~~ my communications have been received, & that your occupations have prevented any notice of them. I would state some facts & ask for advice in behalf of our Society.

We have collected this Season, on the foundation of our local herbarium, more than 600 species, excluding the Gymnocarpi, Cyperaceae, Gramineae & Cryptogamia. The Season is now, substantially, over, & we ought to commence

the preparation of our Herbarium. Dr. Torrey promised to send us the plan of his Herbarium, but has omitted to do so. My impression is that the better plan is to affix each specimen to a 1/2 sheet of stiff paper, to collect the species of each genus in a sheet, properly labelled - & to put the genera into portfolios ~~according~~ labelled with the nat. orders. The use of bound books seems to me objectionable, as it forbids change, addition, & allocation for comparison. You will oblige us very much by your advice, which cannot be too particular.

I have not made any very marvellous discoveries since I last wrote you: but the following facts & queries may be worth writing.

I find the old learned Mariana growing here - a rare escape from cultivation. I cannot reduce it to Cardamus as now defined, nor to any other Genus in your Manual. What is it under the present division?

I find also a Reseda with pinnatifid leaves & five-sided pod. The flowers are in ~~a~~ conspicuous white racemes. & the odor is like freshly fulled cloth. It seems to me that it is not the lutedo. & that it agrees pretty well with the letter of Persoon's Enchiridion -

A small plant - 3-5 in. high - almost invariably with a simple stem - bitter as. It has the aspect of Gratiola virginica, & may be it - but is much slender - is confined to one locality - & from a peep I had into one well-opened corolla (I had lost my magnifier) I think the inside is bearded. Shall I send you specimens?

Yesterday I went after the Botrychium lunarioides var. & found what I suppose to be the a or the oblique form, & the direction (parsley leaved) growing with it. I think I wrote you that I had ~~not~~ found the Aspidium acrostichoides, on the hills near Olean, slightly bunched at top. Yesterday I examined a hundred or more clumps

Buffalo, Dec. 17, 1862.

My dear Sir:

I am about to make up & send to you, by Express, Package No. 2. I do hope you will have time soon to look it over. I feel ashamed at putting you to any trouble at making any draft upon time so fully & horribly occupied; But, it is all important that we should have authentic labels at the start.

I flatter myself that you will find in the packet some few things that will please you. The hope that you will somewhat consider me.

It carries me through all my

usual collections of the last season, except the Cruciferae, Cyperaceae, Gramineae, & Ferns. (I make no count of ~~[illegible]~~ half a dozen lichens & mosses.)

Long ago (last winter or Spring) I got Prof. Dewey, who has been very kind to us, to promise to examine any Carices I should collect. Prof. Chadbourne has requested me to send him my ferns for collection. ~~[illegible]~~ Some of the ferns I know: and, I think I have picked up nearly all that grow in this neighborhood. Of the Cyperaceae I have merely grabbed one or two every now & then - also of the Grasses. I have no notion how many I have. There must be many.

In separating & arranging the very plants of these orders, I shall put aside full sets to be sent to you, if you will permit.

I hope, in a short time - say - not till about the 2d week in January - to write to you about some other matters.

Very truly,
Your obliged friend,
G. W. Clinton.

Prof. Asa Gray.

Buffalo, Dec. 25, 1862.

My dear Sir:

A merry Christmas & a very happy New Year to you.

Yours of the 22d rec'd last night. It gives me the greatest pleasure — the thought that I have picked up something that pleases you. I can't repay my obligations to you. I might have become a respectable naturalist, but was born from it in my youth. Now, my eyes are poorish — long-sighted — pocket glass, somehow, don't suit — can't see tiny things, so as to tell a scirpus from an eleocharis — but go skurrying about — depending on old recollections, and a notion I have of habit, that is, the general look of a plant, as settling its place even its genus.

of mine. It is the most prolific of, to me, precious plants — full of pleasant botanical memories. On the last season, I collected Vicia americana, Lathyrus palustris, & a Lathyrus which I deem distinct. The whole aspect is very different from the palustris — slender & rounder leaves &c. It looks like what a Western correspondent sent me as L. ochroleucus — but different — Have I sent it to you. Also Astragalus canadensis & lonchocarpus — leaves Senecio — Spiraea opulifolia — the bitter Gentian. Parnassia lenticularis — Triglochin palustre — Platanthera flava — Liparis Loeselii — & a specimen of what I suppose to be Spiranthes cernua. All these are from the head of the Island — and in the head too is the only locality I have found of the Equisetum palustre. That locality is quite limited. The thing grows, in the interior, not in a wet, shallow, rushy swale, but on the

To become a Botanist, is hopeless — I am & must remain a mere Collector: but then I collect for my friends, and for the Buffalo Society of Nat. Sciences. If I can please my friends & help the Society, it pleases me. The Society is young yet — & you have been most kind to it & to me. I want it to succeed. Money I cant give it — and I give it all I can — the benefit of my example & pleasant labors. There now, I have shown you a big bit of my heart: And now to business!

I would like the Solidago Muhlenbergii back — or, some More Specs of it. I think it better to have a collection of my own — as well as to do all I can to make the Society Herbarium full — for believing that it will enable me to work more easily & effectively next year.

Strawberry Island is in the Niagara River, & thank Heaven! is American. It is the second Island from the foot of Lake Erie, and is ½ to ¾ mile long. The head, for from 20–40 rods, is grassed rising from 1 to 2 feet above the water, and ~~interrupted &~~ slightly rolling — (rolling is too strong a word) but the head itself is not probably dry and, excepting the heads, is everywhere grassed & sedged — you cannot walk dry footed across it. A few willows & Cottonwoods grow on the edge of the head. The lower part of the Island is mere marsh. ~~The~~ The fishermen have ~~two stations~~ nets for drawing nets. ~~The~~ The coarse grasses & sedges it produces are cut & cured for stuffing mattresses. Two men & boys set in to it on the West side near the foot.

This Island is a favorite resort

dwarfish land in the border of it. I collected but little of it. I think however, that I have not sent any of it away. & I will look up & send you all I have, reserving only a specimen for the Soc. & one for myself.

I have omitted, in the good things the head has given me. Equisetum variegatum - are a two specimens. Lobelia Kalmii & Leptamnitha globella. v. Nuttallii.

I do not deem my favorite Island exhausted. I shall, I hope, reap a good deal more from it - if you will only give me, and I know you will - a fair start in the Gymnaceae, Hypperaceae & Gramineae. To that end I shall send you, to-day or to-morrow, a package of my grabbings up of them. I was ashamed to trouble you too much - and had prepared it to send to a botanical Correspondent in Pa.

But I infinitely prefer your namings.

The Antennaria biennis grows 1st in the city, by the side of the track of the Bo. & State Line R. Road. 2d In a low meadow, about 1½ miles out of the city. That R. R. runs through the meadow. 3d I noticed it by a road side - a few plants only - about 2 miles from the city - near a barn - on high & dry land.

I will add something to the package I ~~propose~~ shall send you with, ~~or~~ probably write you again. I am not without hope that you will find a thing or two in it to please you - because, in general, I grabbed only what struck me as being in some way remarkable.

My grabbings of Carices I sent yesterday, to Professor Dewey. If there be anything in them of any moment, I'll send it to you.

I wrote, long ago, to Dr. Engelmann ~~[illegible]~~ he never noticed the letter. Therefore I am, Christianly, mad at him: and shall write no send to him, until ~~he has~~ my wounded pride is somehow soothed - a case, I believe, very easily effected.

I ought to add that, though I utterly distrust my own conclusions - I believe I know ~~[illegible]~~ many of the things I send you unnamed.

Very truly your friend.

G. W. Clinton.

Prof. Asa Gray.

I send you the packages - understanding that nothing is occupied here fully you will take up some Sat'y next day.

Buffalo, Dec. 25. 1862.

My dear Sir:

I must write you again to day. I have just examined the numbering of my equisetums & apprehend that I may have committed an error. that the specimens I sent you & those I retained were numbered differently. You write

"Equisetum No. 1 = 3 depauperate."
" " " 3 = palustre."

Now my No. 1 is the one from Strawberry Island which I wrote this morning.

I had no idea that my No. 3 was the palustre. I think I can assure you that it is a not uncommon Equisetum with us.

I gathered, it seems, only 2 specimens of it. The other, if you wish it, I will be much pleased

to send you. I ~~took~~ took only 2, supposing it to be a variety of the linosum. There was plenty of it in the locality — which is Squaw Island, the first Island below Lake Erie, and American. The Island is the outside of the lower part of the Black Rock Harbor. From its head, the Black Rock Pier runs up into the foot of the Lake.

I am very confident that I had observed this Equisetum (my No. 3) before — in another locality — growing in a ditch, or rather on the sand in the edge of a ditch, on the Buffalo & State Line Railroad, about 2 miles from the City. But ~~there~~ there were not over 2 doz. plants; and, to my great regret, they were cut down before fruiting. This was before I found the No. 3 on Squaw Island.

P.S. On turning to my journal, I find the following entry — "June 23. Squaw Island. Lathyrus palustris. Equisetum palustre? Andrangea? Also I got the autumnalis etc." I must leave it to you to decide whether it might be the Equisetum I collected there.

I must leave out, or, in fact, I have not yet examined.

This must have been after, I think, June 23.

No. 1 on Strawberry Island, Mich.

I put in the package all I have of No. 1, except ~~some~~ 2 inferior specimens. I also put in 1 or 2 good specimens of Equisetum variegatum. I must have sent away to correspondents specimens of No. 1 — for, I am sure I collected 5–10 specimens.

I will now complete & put up package.

I hope you will yet find time (day & hour) to answer as to the Sphagnum —

Stamington No. 2.

Helianthus — 14.

Yours very truly,

G. W. Clinton.

Prof. Asa Gray.

Buffalo, Dec. 25, 1862.

My dear Sir:

A few more last words of Mr Celestin - touching that Espalustre - and there shall be an end of it.

I began botanizing last Spring, in utter ignorance of what had been done by Botanists during the previous 32 years.

Some years ago I bought Wood's Class Book of Botany, for my daughter, hoping that she would imbibe a taste for Botany - but she did not.

I used that Book, and only that Book, until late in the Summer. I then purchased his latest edition, the last edition of your Manual - & Chapman's Southern Flora -

and have ever since used & depended upon your Manual.

When I found Equisetum palustre, I was using Wood's edn of 1855. In that he describes E. palustre & states its habitat as "Marshes. Common." I supposed it was common. Whence my indifference & the entry in my journal.

In his last edn Wood drops the species: It is not in your book. & the plant being dried & put away. I forgot all about it.

Yours very truly,

G. W. Clinton.

Prof. Asa Gray.

Buffalo. Jan. 26. 1854.

My dear Gray:

I wish I could begin "Celinten redivivus to Gray Semperviren!" but I am so dull and bedroped! I believe I had not even the grace to wish you a happy New Year - you, who have done so much to make my last two years so heavily happy! And, even now, I have not the energy of a mouse. I cant muster enough to enable me to be decently attentive to Agassiz the famous, who is now lecturing here before our Soc. By the bye! what a queer thing a lecture is. A distinguished man mounts a stage, and, in one hour and a half, talks what he has written often, & what, when he has written well, he has compressed into 20-30' easy reading - and he delights his audience - even that portion who have read his writings. There's a

Not of my garret early - and I will surely send you something to show you that I was not idle altogether.

Most truly,
Your friend,
G. W. Clinton.

Prof. A. Gray.

And so, Francis Boott is dead. The announcement, though I never knew him, gave me great pain.

philosophy in this which I do not understand. Perhaps we all like to have our pates scratched, & tapped, & rubbed, by expert barbers. Perhaps our minds are like shingled roofs (only vastly more so) in which the nails represent our ideas - and are continually working up & out, & require to be knocked in again from time to time. I am very sure that I would rather read Agassiz than hear him lecture.

I have been, perforce, to Albany, three times this winter, & I understand, have been placed upon the Commtee on the State Cabinet, by the Chancellor: at least it was announced to me that he would put me there. Assuming that I was to be so honored, I visited New York, & tried to throw off my lassitude & make myself agreeable among the botanists. I found Gr. Thurber in, and, poor wretch! I think I must have talked him very tired. And then I dropped in upon D. C. Eaton, and kept him up. I don't know how late. And then I called, by appointment, on Dr. Torrey, and talked the State Barbarism matter over, and was charmed to find that he approved my views concerning the same, & promised his co-operation. In truth I had ~~the~~ a fine time. It was sport, the finest sport to me, whatever it may have been to them. I called at Ticknor & Fields' & got the Garden Botany & Addenda, but could not find the Add^n which I have reason to think you made this Spring.

I have some thoughts, if I live, of trying to get up a party next Season, to explore the Adirondack Region. Mount Marcy (strange ignorance in the naming) is a little fellow beside Mt Washington, but, for the home of New York, I am assuming that our scanty Alpine hills should yield a profuser and rarer flora than ~~some~~ the half-mountains of our Northeast.

I hope to get at my last season's collections soon - I may be able to do so this week, especially if they get the wash

38 - Panicum

39 - " (Leptoloma)

40 - " virgatum - Albany - Buffalo - Portage -

41 - " miliaceum? Not ~~seen~~ uncommon in old ploughed fields - i.e. spontaneous for a year or two after it has been sown.

42 - Sporobolus cryptandrus - Thinking you might wish some specimens, I put these in for you. You named the plant for me last year.

43 - This plant has bothered me very much - and I half persuaded myself that it is not in the Manual.

44 - 46 - Probably all the same - but from different localities - all dry ground. Dare not venture a guess.

P.S. The packet is completed, & I think will go by Express to-day. Do you wish any Cyperus Schweinitzii?

Buffalo, Feb. 1, 1864.

My dear Gray:

In New York, Mr Thurber kindly volunteered to name my grasses for me - knowing how very busily engaged you are. I accepted his kind offer, & a few days ago, sent him a package. On looking over a bundle I discovered that I had not sent him all, and among those I did send was one grass which has bothered me excessively, and which you must name - I'll not be satisfied with any body else's naming of it. So I have put up a small packet which I shall send you as soon as I have added a few Gymnocarpa, and Cyperaceae: bad, as I wish very much to fill up the great gaps in our Cat. I hope you will be able to look them over soon.

As I want your labels, I would rather you should fill up the blank labels &

return them and the plants. But, if this be at all troublesome, you can take the other way. Should there chance to be anything in the packet you'd like, let me know. So soon as I can, I wish to send you a packet of some of our other plants about which I am unsettled. Two or three times you advised me to submit certain plants to Dr Engelmann: So, I have written to him, to the effect that, if he pleased, I'd send him a Sagittaria, a Sparganium, an Potamogeton &c.

As to the grasses I send you, you must not think that I have not some notions of them. I think I know most of them. But I know my conclusions are not the certainties our Society ought to have.

I append a list of the Nos. with some of my notions, or guesses.

Yours ever most truly

G. W. Clinton.

Prof. A. Gray.

1. I want to call this Aira caespitosa. It is a beauty, when living.
2. Setaria — See note on label.
3. Bromus ciliatus.
4. Bromus — I have seen it in but one locality, & caught it too early & too late.
5.
6. 7. Glyceria.
8. Agrostis? If A. alba, my diff^t in app'ce from the alba growing on the sandy shore.
9. A. alba.
10. Agrostis? a very delicate little species.
11 – 19. I suppose all Muhlenbergia — perhaps 3 species — certainly 2.
20. 21. I have not.
22. Eleusine Indica, Albany.
23. Glyceria?
24. Andropogon Scoparius.
25 — furcatus.
26. Sorghum nutans.
27. Oryzopsis? — not asperifolia.
28. Elymus Striatus.
29. Lolium perenne.
30 – 37. Have not seen.

Buffalo, Feb. 11, 1864.

My dear Gray:

I thank you for your "Contributions," and am very much pleased with your, so far as I can judge, successful efforts to bring order out of chaos: And yet ——! It must out — I am somewhat — and, perhaps, not disagreeably surprised.

Think of it! I had pictured Gray, the great Botanical Gray, as, in his scientific investigations, a cold, severe, exact man of Science: and now — O horror! — I find him, in these very "Contributions" ~~writing~~ — in this purely scientific paper — in ~~describing~~ his recount of Cryptotis ~~multicaps~~, — how shall I write it! — mentioning it as "this most rare & charming little

alpine species!!!!" I am surprised, delighted, charmed. I do wish that our botanists were all more Audubonish - I am glad to note such an outbreak in our botanist.

But I insist that the C. multiflora - charming though it be - cannot be more charming than hundreds of less regarded things, with which I am familiar. For instance - in a small package of grasses the I sent you lately - what I want to, but dare not call, Aira caespitosa - Whatever it may be it is a rare beauty.

Just now I am troubled about 1000 things or less: But will soon, I think, send you another small ~~one~~ packet, including some things you wished. I know how you allow yourself to be over-pressed - but appeal to you, without hesitation, believing that turning over the familiar things I send you, resting my doubts, must be light recreation rather than labor.

Yours truly yours,

G. W. Clinton.

Prof. Asa Gray.

Buffalo, Feb. 13, 1864.

My dear Gray:

Many thanks for your kind attention to me & my grasses. You have enabled me to add 22 to my catalogue, with confidence. I had, in my own mind, attributed to several of them their true names. What a goose I was to send to another in the fear of troubling you! Hereafter I must admit any such fear.

I am somewhat surprised at the Bromus's turning out to be B. ciliatus - it is so very different, in aspect, from the tall, slender, & graceful form to which I have heretofore attributed that name. I must put the two together, & take a thorough look at them. As to the Triaenopis which bothered me so much - it is, of course, a Triaenopis - but it has no right to be

me - or, rather, it had no right to give me such trouble: But, I am a little excited to find it credited, by the Manual, to "the coast of Southward". What right had it, then, to intrude in the interior & bother an poor old man like me!

As to the Panicum (No. 41) I suppose it to be P. miliaceum, L. It is cultivated here & there, in little patches, I believe for bird seed; and perpetuates itself, at least the following year. I noticed it last season, for the first time.

I had no idea there was anything in the packet worth your keeping; & feel humbled at the return of any one of them opening into your Herbarium.

You need not ~~bind~~ return the specimens - Your hand to the labels will answer every purpose.

So soon as I have returns from Dr. Thurber, I shall work out the Cat. & put it in print. Or rather so soon as I shall have returns from him, and your answers to another small packet which I am trying to get time to make up & send you.

I have now 59 ascertained grasses of this vicinity - to say nothing of some which I sent to Dr. Thurber. His returns must add something to the list. This is pretty well for me, in my humble capacity of a grabber, considering that I have had but two seasons to work in, and so many other things to look for. Rock-a-doodle-do! There's a flap of the wings and a crow for you!

Yours most truly & gratefully,

G. W. Clinton.

Prof. Asa Gray.

Buffalo, March 29, 1864.

My dear Gray:

To-morrow, I believe I shall be able to mail you my Preliminary List of the Plants of Buffalo. And I demand that, immediately on its receipt, you write me saying, "pretty well for you." I do feel gratified that I have at last made the smallest mite of a contribution to Science. I know ~~that~~ how extremely minute it is. I would not be so exacting, but for the fact that my letter-file book is just full, and I want to commence a new one with a letter from you. I mean with a note from you — a letter is too ambitious.

Yours ever truly,

L. W. Clinton.

Prof. A. Gray.

Buffalo, July 4, 1864.

Dear Gray:

Immediately on receipt of your Chem. Institical demand for more, I donned my boots, walked out (4-5 m.) to the locality of Lobelia, & after long search, found ensconced in a patch of Lycopodium, a few yet distinguishable, though withered stems of Lobelia, from which despite nettles & mosquitoes, I managed to secure the inclosed. I send you every switch of that dirty little Scirpus. I have it. It was collected by me, June 15, in a sphagnous cranberry marsh - in the Spring=time, in shade - It grew scatteringly - I saw but little - should have got more, but for the fact that I was drawn off from it, either by my companion's discovering Luzula campestris or my observing Carex hirsuta. I visited the swamp again, June 30th & could not find it. In same swamp grows a small flowered Typha - leaves like those

of P. chloranthus, flowers beautifully pink-
ish externally — somewhat numerous —
very pretty. I presume it is the one
Torrey wanted to make a species of, but
relented. I believe he put it under R. ver-
which it does resemble nearly as much
as it does chloranthus — speaking from
memory.

I have reason to believe, from an
old letter of David Thomas to me, that
he cultivated the California. I wrote
to his son for seed.

Yours ever

G. W. Clinton.

Prof. A. Gray.

Rumex is villanous. We have what
seems to be R. altus — and what seems to
be crispus, only the valves are plainly
so much toothed.

Buffalo. July 6, 1864.
7½ P. M.

My dear Gray:

"The Plains" between Buffalo and Williamsville were, it is said, Oak-openings, when the first White men came into this region, covered with tall grasses, which were regularly fired by the Indians, in latitude Summer, to drive thither the game, by the temptation of fresh herbage in the Autumn. The underlying rock comes close to the surface, & is a limestone filled with horn-stone. I need not say to you that, in the heats of Summer, the Plains are excessively dry. I took a short stroll on them, this afternoon, in the dry time — and there, snatched up the inclosed tuft (the only one I saw) of a sun-dried, withered thing,

which may be the little Scirpus I sent you. If it be, Mammy must have played me a strange trick, and it must have been something else which I picked up the Cranberry marsh near Akron. If it be that Scirpus, and I live and am here next June, you shall have a cock of it.

I also inclose to you, from the Plain, two specimens of the Isotecum lepens v. pennsylvanicum, of my unfortunate first-found species so named on the authority of Dr. Thurber. You subsequently decided it to be a variety of I. caudatum. Mr E. Hall, to whom I sent it with the things, wrote that he was glad to get it from this part of the country - that he had collected it, or had it (I forget which) from the Rocky Mts, & was confident that it was neither lepens nor caudatum.

I can assure you that it has no running rootstock. I inclose it thinking you might possibly be pleased to examine it; and I can safely promise you any quantity and in any condition that you may desire.

I am infinitely obliged for the Selaginella Selaginoides. It is very different from what I had imagined.

I am much obliged to you for the acquaintance of the Rev. Jas Fowler. He is a clever fellow. I saw over my duplicates - or the larger portion of them - with him. We made up a quite a package, with which he started off, last evening, expressing himself much pleased.

Yours ever -

M. W. Chickering

Prof. Asa Gray.

Buffalo, July 13, 1864.

My dear Gray:

You have given me sincere pleasure. I am glad that one more new thing under the sun, however humble, has been picked up. I am delighted, not so much at the prospect of my being recognized as a member of the botanical fraternity, as by such a mark of your kindness and regard. Please God! we will live and enjoy many of ~~the~~ good things together as well as that poor little Scirpus.

I am considerably battered by the smaller Panicums. I was at visiting Dr Butler, Rochester yesterday. & walked out 5 miles after a Geranium - which turns out to be pusillum. & then we went 3 miles, in another

direction, to the head of Sundequirt Bay. At the ~~head~~ edge of the Marsh is a small, nearly circular knob, 60-80 feet high. On the side of which are 3 ~~pine~~ Puccinias. One, probably, the depauperatum. & the other, perhaps, more forms of Dichot^m but they are extremely different in habit, & I could not find, where never, to my recollection, seen anything intermediate. One is extremely hairy, & Dr Britto (I think mistakenly) taken it for the vicosum. & the other is very smooth, the leaves thin, shiny, & inclined to irritation. There is, though I think I did not find it there, though I did the caeoma, still another more delicate fellow, approaching the last. I must, I think, put them up & send them to you in a day or two.

Two or three days ago, I ~~said~~ mailed to Mr Bebb, 2 specimens of our common Puccinia, for his opinion. He especially delights in Puccinias. I hope the rebels have not got them. Especially do I hope they won't catch poor Bebb. I try not to think of them. But the events of this time do trouble, sadden, & sometimes almost maddens (i.e. make mad, angry, almost furious) me.

Yours ever

M. W. Johnston.

(I believe I have neglected to write to you that Dr Britto found Lemna trisulca in flower sometime ago, and in learning the fact. I wrote asking specimens for Gray & for Prof. Gray. 3d for self. & he sent me a small packet which I have not yet opened. I also wrote for the seeds of the ~~dead~~ or cured scarce thing. But believe he failed. Do you wish the specimens?

Prof. Asa Gray.

Buffalo, Sept. 8, 1864.

My dear Gray:

I have seen Silliman's Journal, & I must say it — and I delighted — not so much by the compliment of a dedication of the poor little Scripen by you to myself, as by the kindly, graceful manner of your doing it. That is an honor which I feel proud of — whatever may be the fate of the species.

I come and see you! That I will, but whether in October or November I cannot now say. There are very many things you can teach me in an hour, which, by correspondence or otherwise it would take me long to learn. And then I want to see you face to face.

I have no news of consequence.

Last week I spent a day with Paine, in visiting his swamps — V noble ones they are. He is an ordained minister of the Presbyterian denomination, and has been prevented, only by his health, from taking charge of a congregation; and he anticipates not being at Utica next season, and so wished, I thought, to show me some of his stations. He is very amiable, but, like most young men, somewhat sensitive. I like him very, very much. His heart is, I think, in Botany, but he feels ~~the~~ probably, that he cannot — perhaps that he ought not — devote himself to natural science. I am very sure that he will carry his energy into his profession and prove a very useful man. By the way — ~~you~~ at the present, he likes to be addressed simply as "John A. Paine, Esq."

When I come, if I do not before, I will send them I will bring you a small lot of my rubbish.

Yours ever,

G. W. Christian.

Prof. Asa Gray.

Buffalo, Oct. 28, 1864.

My dear Gray:

Very many thanks for your kind, good letter, just rec'd. I am very much troubled about many things just now - even as to how to live, prices here so risen, which my salary does not. Then I hold a Court week after next. Next week I must run down to New York to reclaim my wife & daughter, who are there on a visit, & bring them right back. Then I must look over my collection, & sift out what I want to take to you. Then, before going, I want to visit Foster's Flat & dig for you roots of Trillium grandiflorum & Polygonum Cuspidatum. So that the when I can come to you - and I long to - is a matter of uncertainty. But come I will - if possible - and will advise you timeously, beforehand.

I have not heard ~~from~~ of the Black=
mun, nor from Mr. Dyer, yet.

I am very glad that you & Torrey had such a nice time.

I have not been able to do much of late.

Pennsylvania, as you are aware, took advantage of the simplicity of the State, and contrived to grab a narrow slip of territory, running from her proper self, to Lake Erie, and so embraces Erie, with its fine Bay and the Peninsula (Presque Isle) that makes the Bay. Long ago, I volunteered a promise to Prof. Porter, to visit Erie, this Season, and add something to ~~Lists~~ the materials he has for a Catalogue of the Plants of Pennsylvania. I was unable to perform that promise until last Monday - and gave a day & a half to exploring. If I correctly interpreted the ~~Barnacled~~ list he sent me, I have added 14 species to his materials. I sent him specimens - 4 from the City, 10 from the Peninsula. Among them was Asclepias Cornuti - as to which I apprehend there must be some mistake. The only notable ~~things~~ additions I found on the Peninsula, are Myricea cerifera, & Lagerstrœmia Indica - both new to me, though credited to Lake Erie I think.

I believe I wrote you that I found Zauschneria near Liverpool - It has, since, been found at Buffalo - & is, probably, common in the interior - at least in the waters connected with the great chain of Lakes.

Yours ever,

L. W. Clinton.

Prof. Asa Gray.

Buffalo, Nov. 17. 1864.

My dear Gray:

Mr Wood, in his Class Book, credits Schizæa to the Western Part of this State on the authority of Mr Timothy Westmore (Westmore.) I deemed myself called upon to ascertain the fact, and so, by dint of correspondence, ascertained that Mr Westmore ~~had been~~ was a very promising young man, a teacher in a Seminary in Niagara County, who had made up a herbarium & died young: and I procured the herbarium and have it now on my lap. It was made up in 1842-44, and the specimens are mere snips, sewed into a book. He had no aids in the study of botany except Mr Lincoln's book and, in common with a friend who owned it, a copy of Eaton.

As to his Schizæa, it is, manifestly, a Botrychium — either Virginicum, var.

simplex, or a depauperate form.

It occurs to me that the following extracts from the herbarium may possess some interest for you, and therefore I make them.

One imperfect specimen, which, as far as it goes, answers his description. He named "Trillium viride", and there are his remarks. "From appearances should judge it to be a distinct species, not described by Eaton or Mr Lincoln. Though the T. viride of Mr L. resembles it very much. Last year I found but one specimen, this season several, & all growing in oak openings. Peduncles nearly erect; Sepals lanceovate; petals ovate, slightly acuminate, green with the borders white. Leaves rather short ovate, acuminate, petioled. Germ small, smooth, & less marked than in the other species. 4 to 8 inches. Scarce."

He had before named, & I think correctly, T. erectum, erythrocarpum & grandiflorum.

The specs were collected in Alabama, Genesee Co., in 1841 or 1842; and my impression is that it is T. erythrocarpum.

In his collection of 1843, he has a leaf & flower of T. erythrocarpum, labelled T. pictum, & ~~has~~ there remarks touching it, after expressing doubt as to the accuracy of the label: "I found it on shady hemlock knolls, & observed an occasional one with 4 leaves, 4 Sepals, 4 petals, 4 pistils and 7 stamens. One I saw which had the No. 5 throughout except in the Stamens, which were 8." The specs was collected in Alden, Erie Co., May 21.

Is it worth while, for your satisfaction, to make an attempt to secure these monsters next Spring?

Yours ever

M. W. Chapman.

Prof. Asa Gray.

UNIVERSITY OF THE STATE OF NEW YORK,

Office of the Regents,

ALBANY, Jan. 20, 1865.

My dear Gray:

Here I am, safe & sound. How can I ever sufficiently (for myself) thank you, and Mrs Gray, for the great & constant pleasures of my visit! I don't believe in "mummy's waste" — but in the backward vista of my life my visit to you will be one of the "greenest spots."

Dr Woolworth, our Sec'y, will have put up for Prof. DeCandolle, a package containing the Regents' Reports & the Cabinet Reports (so far as we now have them) since

from 1854. We have, it seems, no correspondence with the Société de Physique &c. of Geneva. The package can, however, be sent through the Smithsonian Institution. But when, if sent to it, it will be despatched, we do not know. To collect the reports ~~with~~ for all we can of them, will require some days. And you will please write to me at Buffalo, or, which will be better, to S. B. Woodworth, LL.D. Sec'y of the Regents, Albany, whether you wish the packet sent to you or to the Smithsonian.

Please present my respects to Mr & Mrs Gray.

I am about entering upon a enforced mass of work here, and ~~my~~ that I shall reach home by Tuesday morning next is hope.

God bless you & yours.

Ever yours

G. W. Chuter.

Prof. A. Gray.

Buffalo, June 12, 1865.

My dear Gray:

I shall put into the Express for you, to-morrow, a small packet, containing —

1st — Your abominable little cheat of a Scirpus. You gave him 10 days to mature & be fit for the transit — he must have got an inkling of it, & hurried up. Value must be expected. Do I send enough.

2d — A perhaps singular form of Carex bebbii.

3d — What 4 Carices which I wish you to name.

4th — Be Polygonatum which, though very likely giganteum, looks very different from the ordinary form.

These things are not dried. V. whatever you may wish to keep, will have to be attended to

I hope to be able, this week, to visit Smith's Creek vegetable of bottinia seed for you.

I have taken to grubbing out the mosses &c – I have got some pretty fellows. Then too, I have found Sagittaria cuneata & Rebellia hemisphaerica in fruit. How wonderfully full earth is of admirable things!

Yours ever,

G. W. Clinton

Prof. Asa Gray.

of me by Prof. Gray.

It seems, by a letter from Mr. Peck of Albany, that I have chanced upon a species Blandowii - a moss not before found in the U.S. I have not looked at the number specimens returned, to see what it is & whether I have made a little of it. Do you like moss? - & is there anything I can do for you in that way?

I have just returned from Stony Island. The little beast which I did not find in flower, nor in seed last year - which I fancied to be Ran^s - reptans, & which you thought to be an exogen - has not raised his miserable little head yet, if he has me. But I found, in flower, growing in the water, what I suppose to be the big Elodea which I have not, hitherto, been able to detect in fruit. It occurred to me

Buffalo, June 21, 1865.

Infandum Dr. Gray, cur me jubes &c.

Last season, from the summer to the close, I found that, with a long, hard walk, my left foot was very painful. In the Spring it was much worse. I favored it - had to - & hobbled. Finally I investigated it. I found that the joint, at the metatarsus, was enlarged, that the toe itself was drawn inward & under the next. A physician told me that the abductor muscle or muscles had overpowered the extensor or extensors, & that there had been absorption on the inner & deposition in the outer side of the joint. He hinted that cutting the abductors or the tendons, & taking a piece out of

the joint, with proper subsequent treatment, might be effective. It occurred to me, things being as he described them, that, if I could raise the big toe, & draw it inward, & so let down the next toe, there might be enough of the vis medicatrix Naturae left in me to work relief, if not restoration. So I took a piece of newspaper & doubled it many times so as to make a pad about 3 inches long, 1 inch wide, & four 1/8-1/4 in thick — and I put it under the ball of the big toe, drawing it inward, between that & the next, & let the end rest on the top of the next. The sock kept the pad in place, & I thereupon could have marched off like a Major. My good wife makes me neat pads of cotton cloth stuffed with batting: & I think God! I am now able to walk as well two furlongs as I could three years ago.

As to Scripps Christmas, he is, I am pretty confident, a goner, & I think it will be magnanimous in me — or rather that the world, whose admiration & applause we are bound to evict, may think it so — to go at & demolish him. So I'll have at him, & find intermediates.

Alas! "I never loved a tree or flower," &c — (poor Jimmy Mac!) Nothing named for me could survive, & I knew it. There was Becki Ram's Christmas! Yes & Tommy ruthlessly killed it. Poor Cancy Christmas was still-born — or, rather, died in embryo. And now, I know it, that villainous little Scripps Christmas is at the last gasp. Let him die! Who cares? Not I, indeed! Nothing can deprive me of that kindly notice

that you might like to see it in flower, & so I'll send it. I am confident it is the fellow, although I had never before, I think, observed it, except at another station 2 miles further off.

Excuse all this nonsense, & believe me

Ever cordially yours,

W. Christison.

Prof. Asa Gray.

Buffalo, June 21/65.

My dear Gray:

Since putting my former note of this date in the P. O., I have looked over my box, and find the specimen which I took for the box ~~Scirpus~~ Eleocharis. So doubtful that I won't send you one of them. I must look further. ~~You~~ Eleocharis tenuis (what I have seen of it) is red stemmed at the base. Perhaps E. palustris is so too. I don't remember about it. I am pretty confident that our big one is not.

Allow me to grumble! You say "look sharp!" Now it too often is. Look at this & look at that! It is too bad! I have contracted an inveterate habit of looking with your eyes, & I won't use my own, if I can help it. That's poz! Botany has, thanks to your kindness, ~~been~~

been all play with me, and now you want to make it work! I won't work if I can help it - and, if I can't help it, I'll work as little as I can.

Yours,

G. W. Johnston.

Prof. A. Gray.

I sent some little Scripes to Prof. Tuckerman, at his request. I'll bet a nickel that every switch of it is plain S. plan's.

Buffalo, Dec. 15, 1865.

My dear Gray:

I have a demand to make upon you. I have intreated once then once. I have used kind sounds; I have thrown tufts of grass at you: and now — I don't dare to throw stones. I'll not write it, at once. There's no use in argument. Verbum Sapienti &c. But if that bri Sapiens be an obstinate, lazy —! Well, I won't believe anything of the kind of Gray. So, here goes!

You owe it to your own reputation — to your friends — to Science, which demands the repression of false pretension — that you should publish the

new edition of the Manual. All your friends desire it. The occasion is ripe. You have all the matter in hand, or easily at your command. You can now make that book nearly perfect.

I will add that I see no reason why you should not cover all the United States, if not all North America.

I entreat! I implore!

Yours ever,

G. W. Letchworth.

Asa Gray.

Buffalo, March 7, 1866.

My dear Gray:

I am delighted! I have not thought the matter through so as to be able to submit any suggestions. I will barely put forward the notion that the true view is the commercial one — that the work or works must pay — that this paying is the best proof that the work was called for & is good. Bearing this in mind, I remember that I want you & all the botanists — to do a great deal — and, if you do all, & keep the whole together, you will produce a book too large for school use. My wants from you are —

(Before broaching that, I'll say that why I wish the Manual to include the Southern States — is, in part — 1st Because many Flora have no heart in it. 2d Every man's work now should, when possible — give us a whole country — and so recognize its unity.)

On the evening of the 15th inst. the Buffalo Soc. of Nat. Science, reopens its rooms to the public — and has a preliminary meeting at which addresses will be made, & a statement of the work & condition of the Society be presented. We want to move the public. Invitations have been sent to all its correspondents — if you don't receive yours, no matter! It has been sent, but mails miscarry. Come, if you can & let me know beforehand if you'll come. If not, please regret it, in a few lines, so written that I can read it publicly to our public, as a proof that the Society is regarded with appreciation & interest

our scientific chiefs

1. A manual of the Botany of the U. States & Canada – or rather of North America –
2. A flora of America – (Mexico too – perhaps.) perhaps adding the Inter-Oceanic islands of the Pacific
3. A Book for the use of Schools –

I want the first & third to be in one volume: I fear they cannot be knocked into one. Their (or its) circulation is a most desirable, and, perhaps, a necessary preparation for a profitable publication of the 2d.

As to the second: there are two policies as to the manner of the typographical & artistic execution –

1st (What I love) the beautiful book way – glorious paper & typography, and illustrations the most beautiful and artistic. – putting the work within the reach only of a few.

2d Such a publication as every botanist can buy. & we will go into every Academy – and will foster the taste and more widely diffuse a knowledge of Botany – and make Asa Gray a household rather than a college word –

But I don't understand these things.

4. I want you to bear me always in your kindest remembrance –
5. I want you to let your wife know that I think almost as highly of you as she does.

And now for a matter of great importance!

Buffalo. May 15, 1866.

My dear Gray:

I'll attend to your little wishes, as well and soon as I can. I think you make Spiræa Lutea too early a flower — for this region at least. It grows, so far as I have observed it, sparsely, in scattered stations, widely herealouts. Last year I noticed some of it close to Buffalo. This is, with us, a backward season.

I am glad that Paine (to whom remember me most kindly) is with you. There he can learn. But (like every body else) he is a goose. What does he want to know the flowers deeply for? They, like all other things, are cheats. Truth

Scantoo! (I am afraid I can't write it in the Greek alphabet.) They are best on sight acquaintances. One might ~~to think~~ just as readily of anatomizing a belle as a flower: either is horrible, cold-blooded, unsympathetic. Moses (is it Moses?) philosophy is the true one — "I'd be a butterfly," &c. — (All this heresy is for Paine — not for you. The truth is, I'm vexed at you. I see you've hugged me in, in your notice of [illegible]'s Mosses, as a reminiscence — when I hardly know an Orthodox from Heterodox: And so I feel bound, being so densely, hopelessly ignorant, to exalt Ignorance. Suppose some one, from my name's being there, should assume me to be a Bryologist. Write me for an opinion upon some vexed question!)

What does Paine propose doing? Is he coming himself to convert the heathen? Will he use botany in the operation, as did St. Patrick among the Irish? I would like to know his plans. I always think of him most kindly.

Yours ever,

W. W. Christian.

Yesterday I found Chimaphila Ann'a in bud, very fine. The beast is more cunning than ever in hiding its offspring. This afternoon I hope to take a start for Cedarville. Spend tomorrow in the marshes.

Prof. Asa Gray.

Yours very truly,
G. W. Clinton.

Dr A. Gray.

I'll attend to that photograph matter.

In Court —

Buffalo, Sept. 30, 1866.

My dear Gray:

Your esquire, Mr Mann, is very naughty, in determining my lentiskile I wrote to be echinosporea; but Engelmann is still worse, for he decides it to be Braunii, which he regards as a good species, distinct from echinosporea. "Better luck next time!" But I am pretty mad — & I'll get rid so much as I can, of my bile.

And first, Dr Gray! I'm at you. I wrote to Dr Eng'n that you were lazy. He wrad up in arms at once, & wrote that you were not lazy but over-worked!!! I don't believe it. You are lazy — sometimes. I

don't believe you can be wearied. You can do all the work that can be thrust upon you, & more, with ease, celerity, & generally, with thoroughness. But what do you mean by calling Mr Mann your Squire? What right have you to a Squire? Now you have given me a peep into your character. You are a knight errant through the world, righting the wronged flowers. But you don't need a squire to bear your shield and your helmet. You are always fully armed. I shall associate you hereafter with the helmed flowers, & see you helmed forever so whenever I open the vice of a snapdragon.

How can you say, as you do, in the Manual, of Artemisia

Came by a dead branch daily.

biennis, "Stem simple." Nothing it branches often & much. It travels mainly by railroad, has reached Utica, & I have no doubt, Albany: and, if your New England Railroads were not so slow, would be in Boston & Cambridge by this time.

As to Mr Mann, he deserves some punishment. Please put him at work on the accompanying list of plants, as I have copied, as well as I could, from labels of a German Botanist. I wish him to correct my misspellings & to write, after each, the Natural Order to which it belongs. I am determined, God willing, to set up my herbarium next winter; & this is a matter of preparation.

Dr Ferd. Mueller, Vr. Vr. Vrs.

Buffalo, Feb. 1, 1868.

My dear Gray:

I am troubled in mind, body & estate, & am very anxious to finish the labor of love I have engaged in — the setting up of the Herbarium of our Society. I have got to & shall, this morning, commence, the Grammineae. The labor (mechanical) is mainly done — that is, the great mass of the specimens to be admitted, are poisoned & on paper, ready to be arranged & put away: — from recent acquisitions. Specimens are to be selected & brought in. I work with method, and therefore, I think, rapidly.

When Bentham & Hooker gave out, I fell back upon Gray — & found that he answered very well.

I am compelled to trouble that kind gentleman again — So, here's at him!

I. This little villain (in the brown paper) had smuggled himself into Müller's Mitchella. You know him by sight & am confident. If so, please return him the name.

II. The following Genera (Compositae) I cannot place. Please tell me who they respectively come near or next to.

Polactis.
Haplocathes.
Dimorphotepis.
Pumilio.

III. I am running out of Genus papers — ~~should~~ am shuddering with apprehension. Do see that I am supplied, at once, (i.e. as soon as may be) with half as much as I had before. The bill to be paid here to the Express — the paper to be directed to Everard Palmer, Esq., Buffalo.

Yours mov. truly —

G W Clinton.

Dr A. Gray.

Everybody has been very kind to me, in the matter of the Herbarium — and I am really growing rich — Chapman (God bless him!) sent me about 500 Floridians. Leavitt enriches me. The venerable Joshua Hoopes sent me 200. Almost every one of these precious gifts must go into the Herbarium. Then a lady pops into my hand a small parcel of Europeans — including Lycoperdon Tuckerianum & H. Wilsonii — things I feared I should never see. People are all very good. Almost as good as Gray would be, if he was not so very busy, & so much absorbed in the love of the lady, by whom I should be proud to be remembered.

But I can't do anything for my benefactors. I will be civil and ungrateful until I have got through the Herbarium — then will I make up packages for

Buffalo, Jan. 1, 1868.

My dear Gray:

I cant let the day pass without expressing my sincere wish that you may have a most happy New Year. I dont know that I would wish it quite so hard, were not the happiness of another, whom I do esteem and admire hugely, wrapt up with yours.

I dont thank you a bit for all the kind things you have done to & for me! I have done so much to you & so much more, in return!! Oh me! It is a sad thing to be full of goodish, kindly aspirations, & to have no power.

Please telegraph to your friends Bentham & Hooker, that, I by the

help of the 1st vol. of their Generata. I have arranged & incorporated the immense Herbarium of the Buffalo Society of the Natural Sciences through Chagrinaceae - and that, when I shall be through Connaceae - I shall be at my wits' end, if I do not receive ~~the~~ part at least of the 2d Vol. Tell them they must hurry up! - that I am all impatience, and that I dont want to fall back upon Sudley. I was startled at finding Punica among the Lythraceae. The truth, I humbly suspect, is - that the so called Natural Arrangement is, in some of its details, just as arbitrary as the Linnaean. (Tell me that only women have whims!)

Yours ever,

G. W. Clinton.

Dr Asa Gray.

Buffalo. Nov. 12. 1870.

My darling Gray:

(Please remember that I am half a century or less ~~than~~ older than you, & therefore have a right to be affectionate — & that I do love you. & I am afraid, you know, a little better —) your letter did me quadrillions of good — I began to think I was alone. Irony is delicious — when you are with him but, when away, you may just as well try to move Mt Blanc as him.

You are wrong about the seed of Vilfa Vanguardensis — & it is nice for us little people to catch you big men in little mistakes: — it enables ~~us~~ to bring you down

from Olympus — you great big fellows!

Send me the Herbarium paper — and all the genus sheets you can spare, less than a million. I can get along, at present — I mean for 3 — 6 mos — with $10 — Let me know what the cost is — It may take me 3 days to get the money together.

I am determined to make the Herbarium of my society respectable & spend all the change I can spare for that end. I shall have to go a begging, still.

I want, above all things, at present, to get a genuine collection of lichens. Where can I get full & well authenticated sets of European, Asiatic, Polynesian, Australian, African, S. American, Lunar, Star, & Stellar lichens in and for how much?

God bless you and your charming wife — whom I long to see.

Ever yours,

G. W. Clinton.

Prof. Asa Gray.

Buffalo, June 26 or 27th / Tuesday / 18[illegible]

My dear Sir:

I envy you your Vacation employment. Though Wellington Field has, in my imagination, an odor variant from that of the flowers of grapes & the fox must be extra-limital.

I have become, by confinement to this City, all covered with moss & lichens and, having secured a vacation until Thursday morning, can't stop to cipher, or any such nonsense, but must hasten to the woods & draw wages, if I come from the free air of the country. And so I implore you to do the arithmetic and let me know how much I owe you.

I am going down town to mail this, & propose to get rid else a $50 – I will, unless my customer be absent from his place of business. On the first day of July Mr Sedgwick comes in, & I shall feel rich for a day or two. I shall also bother you by inclosing herewith a list the remaining numbers which are not, as I cannot find, in the Grisly or in the Cerberus lots: and shall express to you a packet of specimens, touching which I apprehend errors in numbering, & tissued proofs, I think likely – some of them, at least – of my stupidity.

Yours truly & very faithfully,

G. W. Chuter.

Lehras Wright.

Your crustacea seem to glory in you.

I have no news for you. What can I do for you? How can I give you pleasure? Please remember me, most respectfully & kindly, to your good wife. May all happiness wait on your hearth!

I have only Vol. 1 of Bentham & Hooker's Genera. Where & whence can I get the residue?

I am very short of specimen sheets, & am out of Genera multiplex. What can I do? Where can I get a supply, especially of the latter?

Tomorrow I take my wife to New York, & thence to some place on the Seaboard, ~~where~~ for the Summer. I must return here & shall be absent about a week. This month, or next, I hope to embark on some Propeller, & sleep around the Lakes. Do write to & cheer me.

Yours ever cordially,

L. W. Clinton.

Asa Gray.

Buffalo, July 9, 1870.

My very dear friend:

No one can help admiring you, and I am very sure I love you, & that with a love deeper than mere gratitude for your unvarying kindness. Pen over ~~integrity~~. (There, I have given you the last scrap of my poor dignity, & am bankrupt.) I might fib a little & say that I have been deterred by the awful accounts I have received of the jovial bend you brought back from Europe - that reverence had replaced love, & that I dared only to worship at a Silence. But the truth is I have been troubled & sad. Things have not gone to suit me, and affliction has visited some of my nearest relatives & friends. I find too, that now, in my grand climacteric, I have not the energy, nor the hope-

fulness I had a year or two ago; and I often potter rather than work. Very often have I thought "I will write to Gray" - and then the belief that you were immersed in your multitudinous sea of work, and the conviction that I could write you, in my dulness, nothing that would interest you, except expressions of a friendship you could not doubt, lead to procrastination. Your note of inquiry revives me, and I will be a man.

Being unable to excuse (I propose that word, as a convenient one, and claim the credit of it -) at a distance, I have added little to our Herbarium in the way of Phanerogams or Filicoids: but for some 8 or 10 mos. have been hobbling about this vicinity looking for Fungi & for Lichens. Miss Mary E. Wilson of this place - one of the most charming women I know - (there is something about her which reminds me of Mr Gray -) has undertaken the Lichens, and has aided by correspondence with Tuckerman, Prof. Russell, & others, has been ~~assisted~~ enough to help her - by advice - putting her in correspondence with people who ~~assist~~ know. She is enthusiastic in her study of them, & I am proud to act as her hand in collecting them, her health forbidding her to search far & long for them - herself. I am collecting and setting up an Fungi, & rely, almost wholly, upon Mr Peck, to determine them; and it seems that I have found, hereabouts, some nice things - a few wholly new to Botanists, & a few new to this State, & to the U. States. It would be much more pleasant, I suppose, if I could study them myself - but I have not the necessary books & instruments, and am willing to bring them together for the use of others: Indeed the pleasure of the search, discovery, & putting up in order, has been to me a great

Buffalo, Nov. 5. 1870.

My dear Gray:

Very unkind are you in taking no notice of my last — which, if it were true to my feelings, imbodied a great deal of love — and certainly put divers queries, answers to which were important to me. I learned that you returned from Russia with a rough voice & a big, bushy beard. Please be good & return to civilization. If you don't, I'll diet on frogs. I know you are very busy, & all that — but I want you & Mrs. A. Gray, now & then, for sustenance.

I send what was sent me by Dr D. Clarke of Flint, Michigan

what I suppose to be Vilfa bigelowiana
but which, as he remarks, has not
linear seed. ~~as~~ Mennelistic character
of that species.

Yours ever, no matter
how you behave,

G. W. Chilton.

Dr Asa Gray.

Buffalo, N.Y. Nov. 15/70.

My dear Gray:

I was unable, in my last, to tell you the effect the photographs "bewitched like a fiend" had on me. It speaks you delightfully favorably. I long to see the reality.

I have very special use for two more of those photographs. Shall I send to the artist for them?

Yours ever,

G. W. Clinton.

Prof. Asa Gray.

Buffalo. Feb. 5. 1872.

Dear Gray:

I am dying of inanition. "All work and no play" is making me a dull boy. Work (judicial) is holding up & I am out of pleasure. Do have compassion on me, and if you can get at Wright, "that wandering knight so fair" beg, intreat, implore him, for me, to send me my Fungi, and anything else more ready. I am afraid they'll come too late!

Yours ever, till death, &
I hope, thereafter.

W. W. Clinton.

Dr. Asa Gray.

Buffalo, Nov. 13, 1872.

My dear Gray:

I feel deeply for the suffering that the great calamity so near you has produced. We know, indeed, that good springs from evil, and that only God can strike the balance & determine whether more good or evil in the present & in the near future, springs from political, commercial, moral & religious springs from such dread blows at the present. That Boston will rise superior to this awful occurrence, and be more splendid and prosperous & safe than ever, we know as certainly as we can know anything that lies in hereafter:

But all such reflections yield but feeble consolation. It is the misery that is at our door, & that dogs our customary steps, and enters into our houses, that wrings our hearts & forbids all thought of the future. May God, if you do indirectly bear a share of this vast grief, console you. It will relieve me very much to hear that this misery does not involve in it directly any one to whom is specially near or dear to you, or to your admirable wife, – to whom please present my warmest regards. Believe me

Most truly yours,

G. W. Clinton.

A. Gray.

Buffalo, March 17, 1873.

My dear Gray:

I have not overcome my grief for Dr Torrey's death; and don't know that I ever shall. He was so genial — so kind! I want to condole with you: But where shall I find words? I wrote to Margaret Torrey: But, alas! friends cannot give true consolation. I feel, bitterly, my want of power. If there be any thing I can do, to show my respect & love for Torrey, that would please those near & dear to him,

please let me know.
God bless you dear!
Yours ever truly.

G. W. Schuster.

Dr. A. Gray.

Buffalo, April 19, 1873.

My dear Gray:

I was one of the bearers yesterday, at the funeral of a friend, with whom I have sat upon the bench ever since the reorganization of our Court – some 19 years ago. And the associate of some 14 or 15 years, died about two years since. I am old, & weary, & sad. Torrey has gone to Paradise, & you are going to Europe. What shall I do? I potter at our herbarium, but I fear I shall care little for collecting in this tardily-opening season! Do give me a job if you can! I have Kellogg & Smedley's Californian

collection, but very much the bulk of them specimens is not yet printed; & I am out of work. You wrote me, some time ago, that you had some entire Rubiaceae for me, but were waiting to add to them. Please send them on, for I am hungering for work abroad, what is better, tell me when you start for Europe — that Pandemonium of Science (falsely so called, I fear —) and give my love to Mr Gray — to whom I am so thankful — & believe me

Ever yours,

G. W. Clinton.

Asa Gray.

Buffalo, Nov. 26. 1874.

My dear Gray:

Among the many blessings I have tried to be duly thankful for, & held as most precious, your friendship & esteem have been remembered this day.

I longed to visit you & see your good wife once more, as I hoped to do last Season. But I had to have disappointment.

We met, sometime during the past Summer, apparently from the Cayuga Dept., a precious bundle of plants, and made our acknowledg=

ment to the Department. I am just looking them over, and I now believe they were from you. Need I say that I thank you?

I have somewhere seen that the Botany of the South Sea Exploring Expedition, commenced by Sir Joseph has been completed by you and that a few copies are for sale. ~~If~~ We ought to — must have one! Please secure one for me — I mean the reprint of one — & let me know the price — at once!

I am still laughing away at the Fungi —

God bless you again! My love & thanks re=spect to Mr Gray.

Ever yours,

G. W. Johnston.

Dr Asa Gray.

Buffalo, Dec. 14, 1874.

My dear Gray:

I have read with profit your charming article "Do varieties wear out," &c. in The Tribune of the 9th: But I am not convinced that cross-fertilization of individuals of a species is the condition of the continuance of the species. Perhaps (plants being aggregations of individuals, zoophyte-like) the whole family of grasses & that of the Cyperaceae, by their very construction of the ~~form~~ hermaphrodite flowers, rendering its self-fertilization easiest, and, in some cases at least, foreign fertilization difficult, if not impossible, seem to run counter to the hypothesis

Perhaps, if the question, if it be one, whether the flower bud is an unit, or an aggregate of individuals, may enter into a discussion of the hypothesis. If each stamen & pistil be an individual, then, why is not the stamen born of the same bud as the pistil, as foreign to it as one born with another pistil? Now I dont pretend to judge such things, but make these crude suggestions thinking they may amuse you, if they do not fitted to set you a thinking or investigating.

Alas! I have not seen any announcement of the Flora California!

And then you have not noticed my last, one of inquiry touching the price of Gray's Completion of a Botanical Report commenced by the United Survey.

Ever yrs. truly,

G. W. Clinton.

Dr Asa Gray.

Buffalo, May 13, 1875.

My dear Gray:

I named a Puccinia discovered by me P. Marine-Wilsoni. Mr Cooke of London, a distinguished mycologist, ~~says~~ writes that, ten years ago, he named it P. Celastrinae, and, though he never published it by description or specimens, desires that his name should be substituted. Is a matter of courtesy, I would, I think, consent to the substitution. But Mr Cooke also writes:

"Puccinia Marine-Wilsoni is a published name, but as it does not follow the laws of the binomial system, it is liable

to be changed to-morrow, which it could not be if it were P. Maritae, or P. Wilsoni: nor is any one in changing the name obliged to use either of these names, which being applied wrongly, may be wholly superseded."

Please W. Cooke also. I am informed, intimates our opinion that publication of a species in a report – meaning I presume our Regents' Report or the State Cabinet, is not sufficient.

Here are two or three questions of general importance, and I beg you for your opinions thereon: Indeed, if they be mooted questions, I am sure that your opinions would be useful to Scientists in their decision, while with me they would be decisive.

I hope that you have returned, with renewed vigor.

Yours ever,

J. W. Chickering.

Dr Asa Gray.

I might to add, perhaps, that Mr Peck, our State Botanist, communicated to me the ~~extract~~ above

Buffalo, May 22, 1877.

My dear Gray:

I am inexpressibly obliged to you — But I am used to that. Go to Mr Watson, he is very good. Did it come by nature? or did he inhale goodness in the atmosphere of the Cambridge Botanic Garden. Doubtless. Mr G. walks there at times, and makes it more glorious than the flowers; and, as for you, Sir! I do believe that you are the major part of your

blessingness as well as of your blessedness to her.

I am returning to second infancy. I am weak as a kitten, intellectually as well as physically — I hold that I am as playful. I haven't opened that tremendous package yet, and will not for an age long. I am pretty sure that it will convict me of many blunders. And yet I ~~would~~ long to see your transcriptions — fresh — and am tempted to open it for the ladies' sake.

But I must stop and not let another as long a draft upon your precious time. I hope already I've spiritualized the revolutionary dogmas that are rampant in Boston —

Heaven bless you and Abraham.

Ever yours,

G. W. Curtis.

Asa Gray.

Buffalo, Feb. 25, 1878.

Venerable & venerated Sir:

I cannot do justice to the grateful emotions excited by your kind letter of advice. Telemachus had no such Mentor. Your monitions will, I hope, turn me from the unfit dangers you so clearly and delicately indicated: may they be to me as were the solemn sounds of the bells of Bow to Whittington, beaten. I am as poor as he was:- indeed, poorer by a cat. ~~Your~~ The almost paternal interest you exhibit in my

young career will give it steadiness and, perhaps, success. I shall gratefully, to the best of my ability, follow, in all particulars, your advice; and, I frankly declare that I know not whether I shall be more influenced to a strict following of it by ~~some~~ the sad necessity of winning a respectable hope for my young wife, or ~~your~~ justifying your wishes & securing your approbation.

I cannot express my satisfaction I feel in the assurance that Mr Gray takes a friendly interest in me & wishes success to my opening career. I fear that it will end in the ditch rather than at the goal. But I will have courage! How can I prove craven when I have two such friends:- one so venerable and world renowned & one so altogether lovely!

With the deepest respect,
Your young friend
and Servant,

G. W. Clinton.

Dr Asa Gray.

Buffalo, July 9/78.

My dear Sir:

I inclose ripe seed pods of Lepidium virginicum — and of L. intermedium? The flowers of the latter are nearly gone & seem unripened — so that there was a difficulty in distinguishing it save by its taller more whitish growth. To make sure I inclose pods of 3 different plants — numbered 1, 2, 3. You will oblige me by letting me know the results of your examination; and, if you wish, I'll collect a sward of intermedium? for you.

Yours truly,

G. W. Clinton

G. W. Clinton

Sereno Watson —

Albany, Oct. 5/82.

My dear Gray:

Your, and the delightful kindnesses of Mrs Gray can never be forgotten in my recollections of past enjoyments. It is now Sept 4, or 5 or 6, years since adverse fortune, as I esteemed it, compelled me to relinquish pottering over the Herbarium of the Buffalo Soc: and for about fifteen months I have been a resident of this [Fair America] ancient city, engaged in pottering over the Hunger-Celestin Papers, his correspondence &c. - preparing an Index for them, with the expectation of being authorized to edit a selection from them. It is to me - who am nothing but a potterer - a very pleasant employment. It brings before me

Yesterday I found Mr Peck confined to his sofa - to which he had been confined for some weeks. During our conversation he mentioned his desire for specimens of Tillaea Emsleyi for the State Herbarium - ~~a thing~~ an acquisition he has long sought in vain to make. If it will not cause much trouble, please have them sent to me, so that I may have the pleasure of presenting them in your name.

quite mildly. Two at least of my forbears, Mr Prescott everywhere proves that our fathers were not different from us, in the main, more heroic than ourselves. It especially pleased me to find that good old George Christian had a respect for Science, and, amidst all his trials & troubles, seemed to take pleasure in sending such aid as he could to the Ministers, literati, employments for which I have no taste, am not fitted by nature, & cannot have the courage of men of more hearing & wisdom than myself, who seem to & I believe do respect me & sympathize with my addictions to pursuits which are "caviare to the vulgar".

Prof. Peck, I am sorry to say, is out of health.

Mr Lang in Buffalo, has become extremely zealous, botanically, and, his particular industry in discovering & adding to the adventitious of Buffalo, to whose number, the Cattle trains have added largely since I left it. I have taken pleasure in sending him seeds from this City, whose streets are prolific of strange weeds.

Please remember me most kindly & respectfully to Mr Watson.

I rejoice in your ever increasing usefulness & fame, and am

Most affectionately
Your friend & Servt
G W Clinton

Dr Asa Gray. (I have not forgotten dear Mr G's preference for Dr)

over

them to myself as I see them & they seem to smile back to me. I have ~~we custom~~ more frequent occasion than I did to resort to the blessed Manual to make sure of their names. I was delighted to find Salvinia herzogii – an abundant weed in flower beds on the edge – & ~~Shad~~ Cultivation. I was delighted to detect, in the Manual, an approach to an error. It describes the ray flowers as "rounded" – rounded they may be in some sense, – but behold!

Yours ever ~~affect~~ with affection & respect

L. W. Clinton,

Asa Gray.

The Grant Mansion
Catskill, N.Y.
Aug. 26. / 84.

My dear Gray:

I congratulate you on the completion of Part 2 of the Flora. Co for you, – you surprise you are now what to expect in your labors, you pretty maintainstant, generally. Work is your element. You must go on, while life lasts, achieving. Thus I long to see them

Henry, once more! How the
following prospect of rest
for me must delight her,
and how she will enjoy
your ministering during
to her during your labor
abstinence from both.
God bless you. Both.

Would that I had
the Lib. part here, where
with my good wife I
can taking needed but
abhorrent rest. In two

or three weeks we shall return to the Kensington House, Albany, where we have lived for about three years past. I am engaged in indexing & in collection of papers belonging to the State, of my great uncle George, of Revolutionary memory. What exercise I take is in walking through the fields & woods & marshes & exchanging greetings with my old friends, their denizens. I became

Last!

Albany, Dec. 27, 1884.

My very dear friend:

Your precious Xmas note gave me & my old wife great pleasure — on her part not unmixed with the merest mite of jealousy. Being, as she most certainly is, an admirable woman, I know that my dear friend, your stay & joy, would love her. & that the peerless two would be like their husbands, warm friends if they foregathered. She longs for a participation in your friendships — one of my highest honors & most prized happiness.

God bless & keep you for his dear Christ's sake

Most affectionately yours,

G. W. Johnston

Asa Gray.

Buffalo. Jan. 1, 1889.

You have done a good deed — one among billions I doubt not — in warming the cockles of my poor old heart.

My love to you. How can you be, in this New Year, or at any time, unhappy — other=wise than truly felicitous — so long as you remain where I was so delighted to see you, many years ago — at the feet of dear Mr. Gray. I am so glad to be remembered kindly by her!

Mrs. affectionately hers &c.
consequently, yours,
G. W. Clinton.

A. Gray.
Of course I want Buttham.